A W M ASSOCIATION FOR WOMEN IN MATHEMATICS Volume 31, Number 6 NEWSLETTER November-December 2001

AWM ELECTION!!

The ballot is enclosed between pages 10 and 11.

Be sure to vote! Ballot due:

December 1, 2001

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PRESIDENT'S REPORT

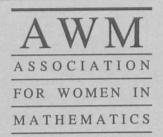
Hello to all AWM members!

We are all shocked by the tragic events of September 11th. As an organization, we stand together to express our deepest sympathies to those who have suffered personal losses in our national tragedy. As the business of the world and the mathematics community moves forward, we encourage all AWM members to remember those who will need support for the next several months.

It is not yet clear what impact these events will have on funding for the sciences. The Coalition for National Science Funding (CNSF), a group of ninety-three scientific, engineering, and professional societies, universities, and corporations that includes AWM, has recently sent a letter to Senator Barbara Mikulski (D-MD) thanking for her efforts, in concert with Senator Kit Bond (R-MO), to double the NSF budget in five years.

We were thankful that the tornado that hit the University of Maryland – College Park campus on September 24th did not damage our office. We would like to express our sympathy to the families of the two students who were lost as a result of the tornado and to our student office worker who has not yet been able to return to her apartment.

The MAA MathFest was held in Madison, Wisconsin, on August 2–4 at the Monona Terrace Community and Convention Center, which was designed by Frank Lloyd Wright. The center on Lake Monona was a beautiful setting for a conference; one could watch the water-skiers from the windows and terrace of the center. Our reception at the MathFest was a big success. The winner of the 2001 Hay Award, Pat Shure from the University of Michigan, gave the AWM-MAA lecture at MathFest. Her lecture was very well received, and her insightful remarks drew many comments and questions from the audience. See page 12 for an article on her talk. On the



The Association was founded in 1971 at the Joint Meetings in Atlantic City. The purpose of the association is to encourage women to study and to have active careers in the mathematical sciences. Equal opportunity and the equal treatment of women in the mathematical sciences are promoted.

The Newsletter is published bi-monthly. The Editor welcomes articles, letters, and announcements.

Circulation: 4000. © 2001, AWM

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day before MathFest, a Women Counts workshop focusing on outreach activities for female students was held; we would like to thank Genevieve Knight of Coppin State College for representing AWM at that workshop. See the article on page 11 written by Elizabeth Yanik of Emporia State University for more details. The inspiring session on "Expanding the Vision: Increasing the Participation of Women" featured descriptions of and ideas for outreach programs for students; see pages 11–12 for further information. Pages 27–28 include MathFest photos.

We are pleased to have such an outstanding slate of candidates for our election. We appreciate the willingness of all the candidates to be of service to AWM. Please remember to vote! There are also changes to our bylaws to be considered. A full copy of the bylaws is available at our website, www.awm-math.org.

I would like to remind you again that the weekdays of the Joint Mathematics Meetings in San Diego are shifted this January, to Sunday through Wednesday, January 6–9, 2002. Thus, our workshop for women graduate students and recent Ph.D.'s will be held on Tuesday and Wednesday, January 8th and 9th. The AWM panel discussion "Mathematics after high school: How to promote success for more" will be held Sunday afternoon; Cathy Kessel, Teri Jo Murphy of the University of Oklahoma and I are co-organizing this panel. Note that the 2002 Noether Lecture "Computing over the Reals: Where Turing meets Newton" will be delivered by Lenore Blum of Carnegie Mellon University on Monday morning. Our reception will take place Sunday evening, January 6th.

The application deadline for our workshop at the SIAM Annual Meeting is January 21st, and the deadline for the next round of travel and mentoring grants is February 1st.

I know that I seem to mention our Sonia Kovalevsky High School Days program in each issue. These workshops can reach so many girls and encourage them to continue to study mathematics and to consider careers involving the mathematical sciences. Remember that the application deadline to receive funding through this program is February 4th. We are looking for funding to expand this program to be able to sponsor more workshops and to include middle school workshops and after-school clubs. If you have any suggestions about this idea or possible sources of funding, please contact me at lenhart@math.utk.edu.

Pao-sheng Hsu, a member of our Education Committee, is leading a delegation of mathematicians to China in conjunction with the International Congress on Mathematicians in Beijing, August 20–28, 2002. Check out the announcement on pages 25–26.

We appreciate your continuing support of our organization and programs. Your comments and suggestions are always welcome.

Suzanne Lenhart

Suzanne Lenhart University of Tennessee and Oak Ridge National Laboratory Knoxville, TN September 21, 2001



AWM ELECTION

This year, we are electing a President-Elect and three Members-at-Large of the Executive Committee. The positions of Member-at-Large are contested, so we encourage you to vote. Statements and biographical data provided by the candidates follow. Those elected will take office on February 1, 2002.

A number of bylaws changes were approved by the Executive Committee in January 2001 and then approved at the Business Meeting. In accordance with the Bylaws, these changes should now be voted on by individual members of the organization. Because in some instances two different changes require changes in the wording of the same article of the Bylaws, the voting must be done in two stages. Details of the changes appear below.

You should find a ballot between pages 10 and 11 of this Newsletter. Also, family members who do not receive the Newsletter will receive a ballot by a separate mailing. Institutional, affiliate, and corporate memberships do not carry voting privileges. Please note that a

MEMBERSHIP AND NEWSLETTER INFORMATION

Membership dues

Family (no newsletter): \$30 Individual: \$50 Contributing: \$100 Retired, part-time: \$25 Student, unemployed, developing nations: \$15

Benefactor: \$2500 Friend: \$1000 All foreign memberships: \$8 additional for postage

Dues in excess of \$15 and all contributions are deductible from federal taxable income.

Institutional Members:

Level 1: \$250 Level 2a: \$125 Level 2b: \$125

See http://www.awm-math.org for details on free ads, free student memberships, and ad discounts.

Affiliate Members: \$250 Institutional Sponsors:

Patron: \$2500+ Friend: \$1000+

Benefactor: \$5000+ Program S See the AWM website for details. Program Sponsor: \$10,000+

Subscriptions and back orders

All members except family members receive a subscription to the newsletter as a privilege of membership. Libraries, women's studies centers, non-mathematics departments, etc., may purchase a subscription for \$50/year (\$58 foreign). Back orders are \$6/issue plus shipping/handling (\$5 minimum).

Payment is by check (drawn on a check with a U.S. branch), U.S. money order, or international postal order. Cash payment will be accepted if necessary, but only in U.S. currency.

Newsletter ad information

AWM will accept advertisements for the Newsletter for positions available, programs in any of the mathematical sciences, professional activities and opportunities of interest to the AWM membership and other appropriate subjects. The Director of Marketing, in consultation with the President and the Newsletter Editor when necessary, will determine whether a proposed ad is acceptable under these guidelines. All institutions and programs advertising in the Newsletter must be Affirmative Action/Equal Opportunity designated. Institutional members receive discounts on ads; see the AWM website for details. For non-members, the rate is \$100 for a basic four-line ad. Additional lines are \$6 each. See the AWM website for Newsletter display ad rates.

Editorial: 24th of January, March, May, July, September, November

Ad: 1st of February, April, June, August, October, December

Addresses

Send all Newsletter material except ads and material for book review and education columns to Anne Leggett, Math Dept., Loyola University, 6525 N. Sheridan Road, Chicago, IL 60626; email: leggett@math.luc.edu; phone: 773-508-3554; fax: 773-508-2123. Send all **book review** material to Marge Murray, Math Dept., 460 McBryde Hall, Virginia Tech, Blacksburg, VA 24061-0123; email: murray@calvin.math.vt.edu and all **educa**tion column material to Ginger Warfield, Math Dept., University of Washington, Seattle, WA 98195; email: warfield@math. washington.edu. Send everything else, including ads and address changes, to Dawn V. Wheeler, 4114 CSS Building, University of Maryland, College Park, MD 20742-2461; phone: 301-405-7892; email: awm@math.umd.edu.

AWM ONLINE

Web Editor

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Online Ads Coordinator

Aileen Gormley aeg@wam.umd.edu

Online Ads Info

Classified and job link ads may be placed at the AWM website. Detailed information may be found there.

Website

http://www.awm-math.org

AWM-Net Editor

Dianne O'Leary oleary@cs.umd.edu

AWM-Net

Send mail to awm-net-request@cs.umd.edu and include your email address; AWM members only.

AWM DEADLINES

AWM Workshop, SIAM meeting, Philadelphia, January 21, 2002

NSF-AWM Mentoring Travel Grant: February 1, 2002

NSF-AWM Travel Grant: February 1, April 1, and October 1, 2002

Sonia Kovalevsky High School Mathematics Days: February 4, 2002

AWM CALENDAR

AWM at the Joint Mathematics Meetings, San Diego: January 6–10, 2002 See the inside back cover for the AWM meeting calendar.

AWM Workshop, SIAM meeting, Philadelphia, July 8-12, 2002

AWM CONTACT INFO

4114 Computer & Space Sciences Building University of Maryland College Park, MD 20742-2461 301-405-7892 awm@math.umd.edu validating signature is required on the envelope; if the signature does not appear, your votes will not be counted. Ballots must be received by **December 1, 2001**.

If you do not receive a ballot or you spoil your ballot, a replacement to mail in may be found at www.awm-math.org, or you may contact Dawn Wheeler at awm@math.umd.edu or 301-405-7892. However, the deadline for receipt of ballots will not be extended to accommodate these special cases.

PRESIDENT-ELECT

Carolyn Gordon, Dartmouth College

The achievements of the AWM in the past thirty years are dazzling. There are dramatic increases in the number and visibility of women mathematicians and in their involvement at every level of the profession, a development in which the AWM has played a significant role. Recently I had the opportunity to meet with Korean women mathematicians who were considering forming an organization modeled on the AWM. As I discussed the many programs and policies of the AWM, I felt a sense of awe at the visionary leadership provided by the founders of the AWM. I also recalled my own introduction to the AWM about six years after its founding: the thrill of walking into a room filled with women mathematicians when I had never before met a single one.

In spite of the tremendous strides made by the AWM, we still have much to do to reach full equality in the profession. We need to attract more girls and young women to mathematics and provide the encouragement and mentoring to keep them in the mathematics pipeline, while at the same time promoting the careers of women already in the profession.

Perhaps I should take this opportunity to introduce myself. My research area is geometric analysis. My previous involvement in the AWM includes being a Member-at-Large of the AWM Executive Committee and chairing the organizing committees for several AWM Workshops for Graduate Students and Recent Ph.D.'s, as well as serving on various other committees. I have been continually impressed by the tremendous enthusiasm of the many women who give their time and energy to the AWM. As president, I will view my role in large part as a facilitator, and I invite and encourage all of you to share your ideas and talents.

MEMBER-AT-LARGE

Fern Hunt, NIST

I have been a mathematician at the National Institute of Standards and Technology for the past 10 years after having spent 13 years as a professor at Howard University in the department of mathematics.

I've maintained a strong interest in broadening the professional opportunities of both women and minorities in the mathematical science professions. Most recently I was an instructor (1998) in the Enhancing Diversity through Graduate Education program (EDGE) sponsored by Bryn Mawr and Spellman Colleges, and I served as co-chair of the SIAM Graduate Student Focus on Diversity Day in 2001.

Krystyna Kuperberg, Auburn University

I highly respect and admire AWM's commitment to all forms of activities designed to attract young women to mathematics, inspire their interest, and encourage them to aim as high as their talent and imagination allows. Most of my mathematical life was spent in a gender-blind environment. For a long time I believed that it was very easy to love mathematics - all one needed was to see it. After I became older I realized how much I benefited from support and guidance that I received in my early years, directly and indirectly, from my parents, teachers, and others. Encouragement can come in various forms: praise, competition, an interesting problem or a lecture, and even criticism, as long as it does not discriminate. One factor, however, prevails: young people should be exposed to science and mathematics as much as possible.

In an age when mathematics as a field experiences inadequate funding and lacks popularity, the work of AWM is very important. The organization not only sets an example of how to reach out to the next generation, but targets a group, the women, with an enormous underutilized potential.

AWM is dedicated to excellence and high mathematical standards. The opportunity to run for an office of AWM is an honor.

Biographical Data: Ph.D., Rice University, 1974. Present Employment: Auburn University, Professor. Committees: AMS Council, Member-at-Large, 1996–1999; AMS Committee on the Profession, 1996–1998; AMS Southeastern Section Program Committee, 1996–1998; AMS Editorial Boards Committee, 1999–2002; MAA Chauvenet Prize Committee, 2000–2003. Awards: Auburn University Alumni Professorship 1994–1999; Alfred Jurzykowski Foundation Award 1995; AU College of Science and Mathematics Research Excellence Award 1996; Auburn University Creative

Research Award 1999. Current editorial appointments: Electronic Research Announcement of the AMS; Topology and its Applications, Managing Editor; Topological Methods in Nonlinear Analysis; Monografie Matematyczne. Selected Addresses: Plenary Lecture, AMS Regional Meeting, Orlando, Florida, March 1995; MAA Plenary Lecture, Joint Mathematics Annual Meeting, Orlando, Florida, January 1996; Lecture Series, Warsaw University and Polish Academy of Sciences, Warsaw, Poland, May 1996; ICM-98, Berlin, Germany, August 1998; Noether Lecture, Joint Mathematics Meetings, San Antonio, Texas, January 1999; CBMS Lecture Series, Macon, Georgia, July 2000; Lecture series, National University of Mexico, Mexico City, January/February 2001. Selected Articles: On the bihomogeneity problem of Knaster, TAMS 321 (1990), 129-143; A smooth counterexample to the Seifert conjecture, Annals of Mathematics 140 (1994), 723-732; (with G. Kuperberg) Generalized counterexamples to the Seifert conjecture, Annals of Mathematics 144 (1996), 239-268; Counterexamples to the Seifert Conjecture, Documenta Mathematica, Extra Volume ICM 1998, 831-840; A knotted minimal tree, Communications in Contemporary Mathematics 1 (1999), 71-86; Aperiodic dynamical systems, AMS Notices, October 1999, 1035-1040.

Catherine Roberts, College of the Holy Cross

As a Member-at-Large for AWM, I would strive to be a voice for younger women mathematicians. AWM has impacted positively on my life primarily through the Workshops (I've been a graduate student poster presenter, a post-grad speaker, a workshop panelist, a participant selector and a workshop co-organizer). While AWM has resonated for me, I recognize that more can be done by this organization to welcome and support a broader set of women. I would support efforts to increase outreach to undergraduate math majors perhaps a place to start would be to establish local AWM chapters. If elected, I would consider myself a representative for younger women mathematicians and the myriad issues of particular interest to them. I would advocate that AWM be proactive within the profession in regards to quality-of-life issues (e.g. partner accommodation, maternity leave, child care). I would seek to increase the profile of younger women within the AWM organization.

Biography: Catherine grew up on Cape Cod and graduated from Bowdoin College with majors in math and art history. She received her Ph.D. in Applied Mathematics from Northwestern University in 1992. Her research is in two areas: analysis of nonlinear integral equations that model explosion and quenching behavior. and modeling the complex interactions between humans and the environment. Most recently, she developed a computer model that simulates white-water rafting traffic on the Colorado River for use by the Grand Canyon National Park as a management tool (reported on National Public Radio and in Science). She involves undergraduate and graduate students in many of her research projects (see http://mathcs.holycross.edu/ ~croberts). Catherine has just begun a position as an associate professor at a small, liberal arts college (Holy Cross in MA) after having worked for ten years at large universities. She is married to an academic chemist and has two young children. She tries not to be last when running in 10K races and enjoys reading mystery novels.

Judy Walker, University of Nebraska-Lincoln

I am honored to have been asked to run for the position of Member-at-Large. Having participated in the AWM workshops as both a graduate student and a recent Ph.D., and having received an AWM travel grant, I have personally benefited tremendously from AWM's various programs. I look forward to contributing to this important organization.

Although it is still early in my career, I have already been active in various programs to encourage women to enter mathematics. My colleague Wendy Hines and I started the Nebraska ALL GIRLS/ALL MATH program in 1997. This program provides two week-long summer camps and a two-day workshop for high school girls interested in mathematics. ALL GIRLS/ALL MATH has received funding from both the Tensor Foundation (through the MAA) and the AMS Epsilon Fund. Additionally, I chair the committee for the Nebraska Conference for Undergraduate Women in Mathematics, an annual conference funded by NSF and NSA that brings roughly 100 undergraduate women majoring in math together for a weekend in February. The program includes panel discussions and plenary lectures, but the main focus of the conference is the mathematics done by these women themselves, and most of the program is devoted to talks by the participants on their own

research.

Like the AWM's programs, these Nebraska events celebrate women in mathematics. In particular, the ALL GIRLS/ALL MATH camps give talented high school girls the opportunity to study challenging mathematics they probably would not otherwise see until at least their junior year in college. Similarly, the Nebraska Conference for Undergraduate Women in Mathematics is an opportunity for the top women undergraduate math majors in the nation to showcase their work. My reason for devoting my time and energy to these programs is not that women need extra help or special advantages to be successful in mathematics; they don't. Rather, it is because the mathematical community will miss significant contributions if women are not encouraged to become, and stay, mathematicians. This is why I believe in AWM, and why I am excited about the opportunity to serve on the AWM Executive Committee.

Biographical info: Judy Walker received her Ph.D. from the University of Illinois in 1996 and has been at the University of Nebraska since then. She is now a tenured associate professor. Her research, which is funded by NSF, centers on algebraic coding theory, especially using methods from number theory and algebraic geometry.

In addition to working with the two projects described above, Judy Walker delivered a series of lectures for the IAS/PCMI Mentoring Program for Women in 1999. She was a 1996–7 Project NExT Fellow, she serves on the AMS Arnold Ross Lecture Series Committee, and she is an editor for both the Rose-Hulman Undergraduate Mathematics Journal and the Journal of Pure and Applied Algebra. Her teaching has been recognized through both college-wide and campuswide awards at the University of Nebraska.

BYLAWS CHANGES

In the Bylaws text below, deletions are indicated by overstriking and additions in **boldface**.

November-December ballot

Bylaws Change #1: The Clerk shall become an elected rather than an appointive position.

Rationale for: Formerly the Clerk was always the Massachusetts agent of the corporation (we are

incorporated in Massachusetts, and the law requires an agent resident in Massachusetts). Recently these two functions were separated. In order to allow the members as much say in the running of the organization as possible, it is recommended that the Clerk position become elective, giving the Clerk voting powers on the Executive Committee.

Rationale against: The Clerk and the President work closely together. Continuing the present system, wherein the President appoints the Clerk, allows the President to choose someone with whom she already has a good working relationship. Because the President alone appoints the Clerk, the Clerk should not have voting powers.

Proposed Bylaws text, Bylaws change #1:

4.1 Qualification and Powers of Directors

The Directors shall consist of all members of the Executive Committee. except for the Newsletter Editor, the Clerk, and the Meetings Coordinator. The affairs of the Corporation shall be managed by the Directors who shall have and may exercise all the powers of the Corporation, except those powers reserved to the members by law, the Articles of Organization or by these Bylaws.

4.2 Number and Election or Appointment of Officers

The Officers shall consist of the Executive Committee. The Executive Committee shall consist of the President, President-Elect (in even years) or Past President (in odd years), Treasurer, Newsletter Editor, Clerk, Meetings Coordinator, and five At-Large Members. The Officers shall be elected or appointed as follows:

In the fall of years 1993+4n 2005+4n, elections will be held by mail ballot of the general membership for the President-Elect, Clerk, and three At-Large Members; the President shall appoint a Clerk, and the Executive Committee shall appoint a Newsletter Editor and a Meetings Coordinator. In the fall of years 1991+4n 2003+4n, elections will be held by mail ballot of the general membership for the President-Elect, Treasurer, and two At-Large Members; the President shall appoint a Clerk, and the Executive Committee shall appoint a Newsletter Editor and a Meetings Coordinator. The Directors shall automatically appoint the President-Elect

to be President immediately following her term of office, and the President to be Past President for the year immediately following her term of office.

4.3 Tenure

The President shall hold office for two years commencing with the odd year February 1 immediately following her appointment election as President-Elect. The Clerk, the Meetings Coordinator, and the Newsletter Editor shall hold office for two years commencing with the even year February 1 immediately following their appointments. The President-Elect shall hold office for one year commencing with the even year February 1 immediately following her election, and the Past President shall hold office for one year commencing with the odd year February 1 immediately following her term as President. At-Large Members, the Clerk, and the Treasurer shall hold office for four years commencing with the even year February 1 immediately following their election. Each officer shall hold office for the above terms and until her successor is elected and qualified, or until she sooner dies, resigns, is removed, or becomes disqualified. The President, Clerk, Treasurer, and At-Large Members are not to hold the same office for more than two consecutive terms.

4.4 Nominations

- a. The Clerk shall conduct elections in the fall of oddnumbered years, except, if her name appears on the ballot, the Past President shall count the ballots.
- d. In order to be counted, ballots must reach the Clerk by December 1. The nominee receiving a plurality of votes cast shall be declared elected in the case of the positions of President-Elect, Clerk, and Treasurer; in the case of Members-At-Large, the three candidates with the largest number of votes in years 1993+4n and the two candidates with the largest number of votes in years 1991+4n shall be declared elected by the Directors. Other candidates shall, with their agreement, become members of the Council.

Bylaws change #2: The Council shall be eliminated from Bylaws article 2.1.

Rationale: The Council has not functioned for many years.

Proposed Bylaws text, Bylaws change #2:

2.1 Qualification

Subject to approval of an officer of the Association, any person with a bona fide relationship to the teaching, learning, and pursuit of mathematics or the legal rights of women may become a member on the payment of dues as determined by the Executive Committee.

A subset of the general membership shall be designated the Council. Members of the Council may be self-nominated or nominated by another member of the Corporation. In either case, a member becomes a Council member by consenting to be one and designating by a Newsletter statement her special interest area. Council members shall initiate projects, organize local meetings, communicate information, or be otherwise especially active in a particular area of concern to the Corporation. Term on Council shall be four years (counting as the first year the year of appointment) with appointment to an additional term upon request by an abbreviated statement to the Clerk. The Clerk shall keep a list of current Council members. their special projects and their terms, and shall notify them of the need to reappointment in September of the year of term expiration. (Statements are due to the Clerk by December 1.)

Bylaws change #3: The Corporation shall be permitted to conduct business via email.

Rationale: To bring the bylaws into the 21st century.

Proposed Bylaws text, Bylaws change #3:

2.8 Call and Notice

c. Reasonable and Sufficient Notice. Except as otherwise expressly provided, it shall be reasonable and sufficient notice to a member to send notice by mail at least forty-eight hours or by telegram email at least twenty-four hours before the meeting addressed to her at her usual or last known business or residence address or to give notice to her in person by telephone at least twenty-four hours before the Meeting.

4.16 Call and Notice

c. Reasonable and Sufficient Notice. Except as otherwise expressly provided, it shall be reasonable and sufficient notice to a Director to send notice by mail at least five days or by telegram email at least two days

before the meeting addressed to her at her usual or last known business or residence address or to give notice to her in person or by telephone at least two days before the meetings.

4.10 Executive Committee

d. Responsibilities.

1. The Executive Committee shall meet at least once annually in conjunction with the Annual Meeting of members at the Joint Mathematics Meeting in January, and generally also at the time of the Summer Mathematics Meeting or otherwise as called by the President. It is a responsibility of Officers to try to attend meetings during their tenure; those who will not be present should notify the President in advance of the meeting. If a majority of the Executive Committee is not present, members having notified the President that they would be absent will be polled concerning actions. The Executive Committee may go into closed executive session upon majority vote. Any members of the Corporation may attend and participate, without vote, in all meetings of the Executive Committee which are not in closed executive session. Interim matters requiring Executive Committee action and approval may be handled by mail or email ballot of the Executive Committee.

January-February ballot:

Note: Should any of the Bylaws changes on the November-December ballot fail to pass, some rewording may be required below. Any such changes will be reflected in the voting information in the January-February issue.

Bylaws change #4: The Web Editor shall be added to the Executive Committee.

Rationale: The Web Editor has already been made an adhoc member of the Executive Committee by that body. This regularizes the position and gives it voting powers, in a manner consistent with the positions of Newsletter Editor and Meetings Coordinator.

Proposed Bylaws text, Bylaws change #4:

4.1 Qualification and Powers of Directors

The Directors shall consist of all members of the Executive Committee except for the Newsletter Editor,

the Web Editor, and the Meetings Coordinator. The affairs of the Corporation shall be managed by the Directors who shall have and may exercise all the powers of the Corporation, except those powers reserved to the members by law, the Articles of Organization or by these Bylaws.

4.2 Number and Election or Appointment of Officers

The Officers shall consist of the Executive Committee. The Executive Committee shall consist of the President, President-Elect (in even years) or Past President (in odd years), Treasurer, Newsletter Editor, Clerk, Meetings Coordinator, **Web Editor**, and five At-Large Members. The Officers shall be elected or appointed as follows:

In the fall of years 2005+4n, elections will be held by mail ballot of the general membership for the President-Elect, Clerk, and three At-Large Members; Executive Committee shall appoint a Newsletter Editor, a Web Editor, and a Meetings Coordinator. In the fall of years 2003+4n, elections will be held by mail ballot of the general membership for the President-Elect, Treasurer, and two At-Large Members and the Executive Committee shall appoint a Newsletter Editor, a Web Editor, and a Meetings Coordinator. The Directors shall automatically appoint the President-Elect to be President immediately following her term of office, and the President to be Past President for the year immediately following her term of office.

4.3 Tenure

The President shall hold office for two years commencing with the odd year February 1 immediately following her election as President-Elect. The Meetings Coordinator, the Web Editor, and the Newsletter Editor shall hold office for two years commencing with the even year February 1 immediately following their appointments. The President-Elect shall hold office for one year commencing with the even year February 1 immediately following her election, and the Past President shall hold office for one year commencing with the odd year February 1 immediately following her term as President. At-Large Members, the Clerk, and the Treasurer shall hold office for four years commencing with the even year February 1 immediately following their election. Each officer shall hold office for the above terms and until her successor is elected and qualified, or

until she sooner dies, resigns, is removed, or becomes disqualified. The President, Clerk, Treasurer, and At-Large Members are not to hold the same office for more than two consecutive terms.

Bylaws change #5: Calendar changes shall be made. Rationale: The first change reflects a decision already made by the Directors. The other changes reflect current practice.

Proposed Bylaws text, Bylaws change #5:

1.4 Fiscal Year

The fiscal year of the Corporation shall, unless otherwise decided by the Directors, end May 31 June 30 in each year.

2.6 Regular Meetings

Regular meetings of the members may be held at such places within the United States and at such times as the members may determine. Two regular meetings of the Corporation may be held in conjunction with the annual and summer meetings of the American Mathematical Society and the Mathematical Association of America. The presence of twenty members in good standing shall be necessary to constitute a quorum.

4.10 Executive Committee

d. Responsibilities.

1. The Executive Committee shall meet at least once annually in conjunction with the Annual Meeting of members at the Joint Mathematics Meeting in January, and generally also at the time of the Summer Mathematics Meeting or otherwise as called by the President. It is a responsibility of Officers to try to attend meetings during their tenure; those who will not be present should notify the President in advance of the meeting. If a majority of the Executive Committee is not present. members having notified the President that they would be absent will be polled concerning actions. The Executive Committee may go into closed executive session upon majority vote. Any members of the Corporation may attend and participate, without vote, in all meetings of the Executive Committee which are not in closed executive session. Interim matters requiring Executive Committee action and approval may be handled by mail or email ballot of the Executive Committee.

Bylaws Change #6: The appointment method for committees shall be changed.

Rationale: This reflects current practice.

Proposed Bylaws text, Bylaws change #6:

4.10 Executive Committee

e. Committees. Either the President or Tthe Executive Committee, upon recommendation of the President after she has solicited the membership for nominations, shall appoint such committees as may be needed to carry out the objectives of the Corporation. Each committee may choose its own internal structure. Upon request of the Executive Committee, committee chairpersons shall report on the work of their committees.

Bylaws Change #7: The due date and destination for ballots shall be changed. The Council shall be removed from the Bylaws.

Rationale: Members have asked to have the voting

deadline extended; December 15th is the latest possible, considering the rest of the calendar. The preliminary change in removing the Council from the bylaws has already passed; the final change was not included on the November–December ballot to prevent inconsistencies, should Bylaws change #1 or #2 fail.

Proposed Bylaws text, Bylaws change #7:

4.4 Nominations

d. In order to be counted, ballots must reach the Clerk Corporation main business office by December 4 15. The nominee receiving a plurality of votes cast shall be declared elected in the case of the positions of President-Elect, Clerk, and Treasurer; in the case of Members-At-Large, the three candidates with the largest number of votes in years 1993+4n and the two candidates with the largest number of votes in years 1991+4n shall be declared elected by the Directors. Other Candidates shall, with their agreement, become members of the Council.

NSF-AWM MENTORING TRAVEL GRANTS FOR WOMEN

(2002 awards are pending final funding approval.) The objective of the NSF-AWM Mentoring Travel Grants is to help junior women to develop a long-term working and mentoring relationship with a senior mathematician. This relationship should help the junior mathematician to establish her research program and eventually receive tenure. AWM expects to award up to 5–6 grants, in amounts of up to \$4000 each. Each grant will fund travel, subsistence, and other required expenses for an untenured woman mathematician to travel to an institute or a department to do research with a specified individual for one month. Any unexpended funds may be used for further travel to work with the same individual during the following year. (Applicants for mentoring travel grants may in exceptional cases receive up to three such grants throughout their careers, possibly in successive years; each such grant would require a new proposal and would go through the usual competition.) For foreign travel, US air carriers must be used (exceptions only per federal grant regulations; prior AWM approval required).

Eligibility. Applicants must be women holding a doctorate or equivalent experience and with a work address in the US (or home address if unemployed). The applicant's research may be in any field which is funded by the Division of Mathematical Sciences of the National Science Foundation.

Each applicant should submit *five copies* of each of the following: 1) a cover letter; 2) a curriculum vita; 3) a research proposal, approximately five pages in length, which specifies why the proposed travel would be particularly beneficial; 4) a supporting letter from the proposed mentor (who must promise to be available at the time of the proposed travel and may be either a man or a woman), together with the curriculum vita of the proposed mentor; 5) an approximate budget; and 6) information about other sources of funding available to the applicant.

A final report will be required from each awardee. All awards will be determined on a competitive basis by a selection panel consisting of distinguished mathematicians appointed by the AWM.

Send *five* complete copies of the application materials (including the cover letter) to: Mentoring Travel Grant Selection Committee, Association for Women in Mathematics, 4114 Computer & Space Sciences Building, University of Maryland, College Park, MD 20742-2461. If you have questions, contact AWM by phone (301-405-7892) or email (awm@math.umd.edu). Applications via email or fax will not be accepted. The deadline for receipt of applications is **February 1, 2002**.

WOMEN COUNT CONFERENCE

On August 1, 2001 a special conference for experienced and prospective directors of mathematical outreach programs for young women was held at the University of Wisconsin preceding this year's MathFest meeting. This conference, Women Count, was organized by the Women and Mathematics Network under the auspices of the MAA Committee on the Participation of Women. Funding for the conference was provided by grants from the National Security Agency, the National Science Foundation, and the Tensor Foundation.

The conference began with welcoming remarks from the conference organizers, Virginia Kasten (General Motors), Kathleen Sullivan (Seattle University), and Elizabeth Yanik (Emporia State University). The twenty-one participants briefly introduced themselves, mentioning either their current programs or the type of mathematical outreach program under consideration. This was following by breakout sessions for those interested in high school level programs versus middle school programs. The entire group reconvened to share some samples of mathematical activities. Krysi Legenza discussed an activity on series and limits; Cathy Gorini described some interesting activities using mod arithmetic; Tina Mancuso and Deb Lawrence presented Math Jeopardy; and Betsy Yanik had the group participate in "How Long to Fill the Bucket?" (an exponential growth demonstration involving lots of water and a five-gallon bucket!).

After eating lunch together, all participants enjoyed the grant proposal writing workshop conducted by Florence Fasanelli of The College Board. This session was followed by a forum on funding opportunities with guest speakers Laura Corcoran from the National Security Agency, Lloyd Douglas from the National Science Foundation, and Florence Fasanelli representing the Tensor Foundation. Next, Charlene Morrow from SummerMath/Mount Holyoke College made a presentation to the group about important elements of the learning environment for young women. The last session of the day focused on the issue of program assessments.

Elizabeth Yanik, Department of Mathematics and Computer Science, Emporia State University

The daylong conference concluded with a wonderful, relaxing dinner in a nearby Italian restaurant.

The purpose of the conference was to provide a forum for sharing information about sponsoring mathematics outreach programs for young women among both current directors of such programs and those who are interested in creating such programs. Many participants came as teams — teaming an experienced director with an inexperienced director from the same geographic location. One major outcome of this conference was the formation of a support network for prospective directors of outreach programs.

The evaluations for Women Count were extremely positive (an average rating of 4.9 on a scale of 1 for poor to 5 for excellent). The anonymous participant evaluations were unanimous in favoring future Women Count conferences and recommending this conference to their colleagues.

More information about the Women and Mathematics Network may be found on the web page http://www.mystery.com/WAM/.

EXPANDING THE VISION

At MathFest on August 3rd, Elizabeth Yanik of Emporia State University, Virginia Kasten of General Motors, and Kathleen Sullivan of the Seattle University organized a session on Expanding the Vision: Increasing the Participation of Women in Mathematics. This session on outreach activities for students was sponsored by the Women and Mathematics Network Committee. Elizabeth Yanik opened with remarks about the Women Count workshop held in Madison before MathFest (see the preceding article).

Viji Sundar of California State University Stanislaus spoke first about her enrichment program on Saturdays for students. Her program has an interesting motto:

Inch by inch/Math is a cinch Yard by yard/It is very hard.

Kathleen Sullivan described her "Wind, Water and Waves — Science Splash" summer program at her

Suzanne Lenhart and Elizabeth Yanik

university. She related a quote from one of the students commenting on the program participants, saying "everyone here is smart, funny and nice." Genevieve Knight of Coppin State College reminded the audience to include the "second line" of female students who are not so talented or have limited opportunities in their programs. Talent and interest may be awakened in these girls as they experience extra opportunities. She also mentioned that "girls are confident at 9 and confused at 15," so programs like the Sonia Kovalevsky High Schools Mathematics Days are very important.

Virginia Kasten works on the updating of the Women and Mathematics Network information web page. See www.mystery.com/WAM.

Florence Fasanelli of the Tensor Foundation mentioned the grants program given by that foundation through MAA for outreach programs for female students. Suzanne Lenhart briefly spoke on the current AWM outreach programs and plans for expanding those programs.

AWM-MAA MATHFEST LECTURE

We have started the tradition of having our Hay Award winner speak at MathFest. The winner for this year, Pat Shure from the University of Michigan, delivered the AWM-MAA Lecture at Mathfest on August 4th. Her talk was titled "The Scholarship of Learning and Teaching: A Look Back and a Look Ahead."

Pat began her remarks from a historical perspective, detailing the isolation of a female student in math courses in the late 1950s, and tracing the path that led her from graduate student to elementary school teacher and ultimately to university teaching.

She talked about how her ideas about teaching developed over the years, mentioning the influence of Uri Treisman's work with underrepresented minority students. She thinks that teaching should focus on developing the qualities of mind which will allow students to adapt to a changing world, qualities such as "openmindedness" and the ability to think clearly and communicate ideas effectively.

She described how the introductory classes at the

University of Michigan had been redesigned to foster these qualities of mind in first-year students, and detailed Michigan's intensive training program for new faculty and teaching assistants.

Turning from her own experiences, Pat looked at the fragmentation of our efforts to understand teaching and learning. She described relevant research situated in a variety of academic disciplines such as: a social science study which found that college women desire academic advisors who believe that they are able to succeed, and a medical study investigating the correlation between iron deficiency and low math scores for teenage girls.

Finally, Pat called on the math community to coordinate its efforts in the field of collegiate teaching and learning, a field that does not precisely fit with either traditional mathematics research or with mathematics education research. She proposed the establishment of a Mathematical Education Research Institute whose purpose would be to run programs involving researchers from all the overlapping research areas. She feels that such an institute would help define collegiate teaching and learning as a coherent discipline.

AWARDS AND HONORS

The Radcliffe Institute for Advanced Study at Harvard University has awarded a 2001–2002 fellowship to TATIANA TORO, an associate professor of mathematics and site director for the Pacific Institute for the Mathematical Sciences at the University of Washington. While at Radcliffe, Toro plans to study the two-sided free boundary regularity problem with rough data. In the long term, she intends to establish that weak notions of regularity are for many purposes sufficient to answer basic questions in analysis and geometry.

Toro's mathematical interests lie in the general area of analysis. Recently she has been studying the geometric and analytic structure of different mathematical models for interfaces. These are often cast as free boundary problems. The free boundary may appear as the interface between fluid and air, or water and ice. The techniques used to address these questions come from geometric measure theory and partial differential equations.

Toro was awarded an Alfred P. Sloan Research

Fellowship in 1996 and a National Science Foundation Mathematical Sciences Postdoctoral Research Fellowship in 1994. Since 1997, her research has been partially supported by the National Science Foundation. She was a member of Princeton's Institute for Advanced Study in 1992, a Morrey Assistant Professor at the University of Chicago and a member of the Mathematical Sciences Research Institute at Berkeley.

Toro earned her Bachelor of Science degree in mathematics at the Universidad Nacional de Colombia, Bogotá, and her doctorate in mathematics at Stanford University.

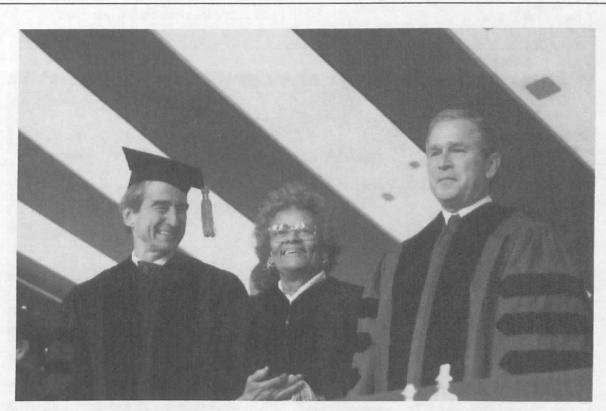
This year, 43 women and men were selected as fellows of the Radcliffe Institute for Advanced Study at Harvard University, where scholars pursue advanced work across a wide range of academic disciplines, professions and creative arts. Their projects were chosen for their quality and long-term impact on society.

Every year NAM has a special one-hour lecture at the Joint Mathematics Meetings. The lecture is named after

W.S. Claytor, the fourth African American Ph.D. (see www.math.buffalo.edu/mad/PEEPS/claytor_wschieffelin. html). At the January meetings in San Diego, the Claytor Lecturer will be KATHERINE OKIKIOLU, University of California at San Diego.

Okikiolu's Nigerian-born father, George Okikiolu has published over 200 articles in mathematics. Her mother is a British mathematics teacher. Okikiolu earned her B.A. in Mathematics from Cambridge and her Ph.D. in 1991 from UCLA. In 1997 she was the first Black mathematician to become a Sloan Research Fellow and also the first Black mathematician to win a Presidential Early Career Award for Scientists and Engineers (PECASE). She received her PECASE for "innovative research in geometric analysis, particularly the determinant of the Laplacian under smooth perturbations, and developing student workshops and mathematics curricula for inner-city children."

To read more about Okikiolu at the Mathematicians of the African Diaspora (MAD) website, see www.math.buffalo.edu/mad/PEEPS/okikiolu_katherine.html.



Recipients of honorary doctorates at the 2001 Yale Commencement Exercises: Sam Waterston, Evelyn Boyd Granville, and President George W. Bush

Photo credit: Michael Marsland/Yale University

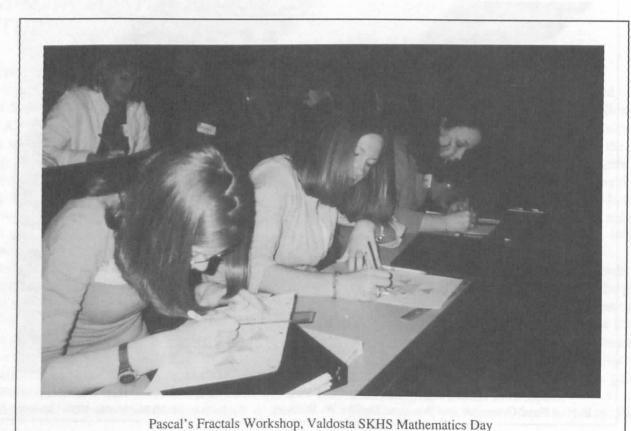
SKHS MATHEMATICS DAY

The sixth Sonia Kovalevsky High School Mathematics Day (SK Day) at Valdosta State University (VSU) in Valdosta, Georgia was held on Thursday, April 19, 2001. The co-directors for the event were Dr. Kathy Simons and Dr. Denise T. Reid, both from VSU. Sponsors for the day included VSU Department of Mathematics and Computer Science, Griffin L.L.C., Lindsey and Ritter, Inc., Target Stores, Addison Wesley Longman, The Center for Disease Control, Houghton-Mifflin Company, Learning Tree Educational Resources, Inc., Prentice Hall, Texas Instruments, Wild Adventures, and the VSU bookstore. Forty students and 12 teachers from nine schools attended. Some participants came from across town, while others made a two-hour trip to VSU. The students were sophomores and juniors. Many had never previously attended a math day of any kind.

The participants had a full day of activities. There were three workshops, one on Pascal's Fractals, one on problem solving, and one on M.C. Escher and

Kathy Simons and Denise T. Reid

Tessellations. Drs. Kathy Simons and Denise Reid from VSU led the workshop on Pascal's Fractals. During this activity, the students learned about Sierpinski's Triangle as well as Pascal's Triangle. They used modular arithmetic to determing a coloring pattern for Pascal's Triangle. Dr. Sandy Trowell, VSU, led the problemsolving workshop. After a brief discussion on what is mathematics, the students working together solved several geometry problems. The tessellations workshop was led by Ms. Pat Bezona, also from VSU. During this workshop, students learned about tessellations and viewed a video about M.C. Escher and his art. The evaluations completed by the participants clearly indicated that the workshops were a success. The students enjoyed the hands-on activities and the interaction among the participants. The career speaker for the day was Mrs. Sigrid Economou, who is with the Center for Disease Control in Atlanta. She talked about her job, the mathematics she uses, and the preparation necessary to work with the CDC. Dr. Mary Fares gave a short presentation on the Regent's Engineering Transfer Program at VSU. Also included in the activities for the day was a mathematics competition consisting of twenty-five multiple-choice questions.



Juice, muffins, and pastries were available when the participants arrived. During this time, the participants registered and mingled. They also had a chance to look at several displays. Included in the displays was a scrapbook of previous SK Days at VSU. Later a buffet lunch was served. During lunch the participants got a chance to interact with each other, as well as with speakers and VSU mathematics faculty.

Door prizes donated by several of our sponsors were given to both students and teachers at the opening and closing of the day's events. The winners of the mathematics competition were: first place, Susan Brooke of Thomas County Central High School; second place, Ashli Garner of Lowndes County High School; and third place, April Highsmith of Thomas County Central High School. The first prize was a TI-92 calculator. Second and third prizes were electronic organizers.

Also in attendance for the day was Dr. Tom Carnevale, Head of the Department of Mathematics and Computer Science. Dr. Carnevale gave the opening remarks of the day, which included a biography of Sonia Kovalevsky. There were also several volunteers present throughout the day. They were VSU students enrolled in mathematics education classes.

The day was a success in many ways. The responses from individual student and teacher evaluations were very positive. They appreciated the opportunity to be included in such an event. Both teachers and students expressed an interest in attending another SK day. This would not be possible without the support of our sponsors. We truly appreciate the opportunity to share with these young girls how exciting and rewarding mathematics can be.

Valdosta State finds its own funding for its SKHS Day, which is fantastic! If you are thinking of having a Day but need help with funding, see the grant announcement below.

SONIA KOVALEVSKY HIGH SCHOOL MATHEMATICS DAYS

Through grants from Coppin State College and the National Security Agency (NSA), the Association for Women in Mathematics expects to support (pending final funding approval) Sonia Kovalevsky High School Mathematics Days at colleges and universities throughout the country. Sonia Kovalevsky Days have been organized by AWM and institutions around the country since 1985, when AWM sponsored a symposium on Sonia Kovalevsky. They consist of a program of workshops, talks, and problem-solving competitions for high school women students and their teachers, both women and men. The purposes are to encourage young women to continue their study of mathematics, to assist them with the sometimes difficult transition between high school and college mathematics, to assist the teachers of women mathematics students, and to encourage colleges and universities to develop more extensive cooperation with high schools in their area.

AWM anticipates awarding approximately 10 grants of up to \$3000 each to universities and colleges; more grants may be awarded if additional funds become available. Historically Black Institutions and women's colleges are particularly encouraged to apply. Programs targeted towards inner city or rural high schools are especially welcomed. If selected, institutions will receive an information packet consisting of model schedules of activities, a check list for the sorts of arrangements that need to be made, suggestions for securing additional funding and for obtaining prizes to be awarded to contest winners, recruitment and publicity material to be adapted for local use, lists of possible workshop topics for students and teachers, model problem solving contest material, and guidelines for follow-up activities and evaluation.

Applications, not to exceed five pages, should include: a) tentative plans for activities, including specific speakers to the extent known; b) qualifications of the persons to be in charge; c) plans for recruitment, including the securing of diversity among participants; d) itemized budget; e) local resources in support of the project, if any; and f) tentative follow-up and evaluation plans. The decision on funding will be made late February to early March. The high school days are to be held in Spring 2002 or Fall 2002. If selected, a report of the event along with receipts (originals or copies) for reimbursement must be submitted to AWM within 30 days of the event date or by December 1, 2002, whichever comes first. Reimbursements will be made in one disbursement; no funds can be disbursed prior to the event date.

Send *five* complete copies of the application materials to: Sonia Kovalevsky Days Selection Committee, Association for Women in Mathematics, 4114 Computer & Space Sciences Building, University of Maryland, College Park, Maryland 20742-2461. For further information: phone, 301-405-7892; email, awm@math.umd.edu; URL: http://www.awm-math.org. Applications must be received by **February 4, 2002**; applications via email or fax will not be accepted.

MATH/SCIENCE NETWORK WELCOMES NEW MEMBERS



Expanding Your Horizons (EYHTM), the flagship program of the Math/Science network, brings together, annually, thousands of young women with role models — women scientists, engineers, mathematicians, and other professionals — for hands-on math and science activities. Last year over one hundred EYH conferences took place nationwide.

Since the first conference at Mills College in 1976, over a half million young women have attended thousands of EYH conferences around the country. The Math/Science Network, working nationally for over twenty-five years to develop and support these conferences, is on a campaign to increase its membership in order to expand its program.

There are myriad reasons why the EYH conferences continue to be important. To mention just a few:

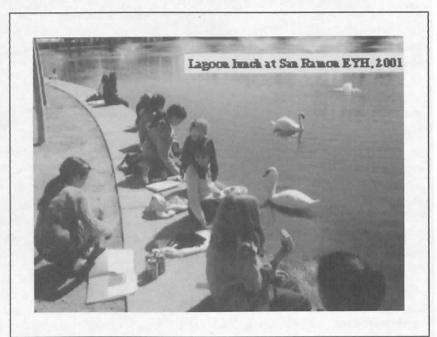
 At EYH conferences girls enter an environment that emphasizes the importance of persisting in math classes, as mathematics continues to be the "critical filter" that determines eligibility for many high-salary occupations, for good jobs, and for college entrance.

- Over 33% of the young women attending EYH conferences are African American, Hispanic, Asian, and Native American students, thanks to the special outreach efforts of the Math/Science Network and EYH site committees.
- EYH is the first time many girls get to talk with a professional woman about careers that require math and science training. For many of the role models it is one of their few opportunities to work with middle and high school students and an opportunity to network with other women in similar professions as well.

For these and many other reasons, members of the Math/Science Network are privileged to join with teachers in mathematics, science, technology and engineering, in showing their

commitment to building increased opportunities in these fields.

More information about the Math/Science Network, and how to join, is available on the Network website at www.expandingyourhorizons.org or www. eyhnet.org, or call the Network office at 510-430-2222.



Teri Perl, President, Math/Science Network

BOOK REVIEW

Jane Roland Martin. Coming of age in academe: Rekindling women's hopes and reforming the academy. New York: Routledge, 2000. ISBN 0-415-92488-X (paper), \$18.95.

Reviewed by: Cathy Kessel, kessel@soe.berkeley.edu. Book Review Editor: Marge Murray, Department of Mathematics, Virginia Tech, Blacksburg VA 24061-0123; murray@calvin. math.vt.edu.

In 1938, Virginia Woolf asked "Shall we join the procession of educated men? Where is it leading us?" In her book *Three Guineas*, she concluded that if women were to enter the academy and remain "civilized beings; human beings, that is, that wish to prevent war," the academy would have to change profoundly.

Sixty years later some feminist literary critics and philosophers claim that feminism is now a part of the academy. Has the academy undergone that profound change? Or did feminists sell out to get in?

Jane Roland Martin examines these questions in her book *Coming of Age in Academe*. Mindful of Woolf, Martin has a question of her own: How can feminist scholars find acceptance in the academy without losing sight of other women and of their feminist roots? This initiates her examination of several aspects of academe often discussed separately: the nature of scholarship, communication of the results of that scholarship, education, hiring of women, and climate for women.

Much has changed since Woolf's time. In the US, women are now 36 percent of overall faculty. Princeton University now has a female president. Presidents of nine major universities have met and pledged to investigate and change the adverse circumstances of female professors as MIT has done. Since the 1950s, the percentage of women receiving Ph.D.'s in mathematics from US universities has increased steadily. For the academic year 1998-99, it reached a record high of 33% for US citizens [1].

However, faculty women tend to accumulate at lower ranks and at less prestigious institutions. Averaged over all fields, 58 percent of all instructors are female and 21 percent of full professors are female [2]. A recent report says, "Less than ten percent of full professors in the sciences today are women, despite the fact that women have been earning more than one-quarter of the Ph.D.'s

in science for 30 years" [3]. The percentage of female mathematicians with tenure has been slow to change and has remained constant between 1990 and 1995 [4]. Despite the publicity in the early 1990s given to the paucity of tenured women in the top ten math departments [5] — about 5 out of 288, depending on how one counted — their number has barely increased.

This filtering out of women — at every level — and the educational environment (including classroom, curriculum, and campus culture) that is part of the filter is one of the three major themes of Martin's book. In what Martin calls "the education-gender system" women in the academy run the risk of estrangement — a second theme — from their own experiences, from occupations traditionally considered "women's occupations," and from other women. The third theme is transformation of the system, ending filtering and estrangement.

Martin's framework for thinking about feminism and women's experiences in the academy was thought-provoking for me. The few feminist critiques of mathematics that I've read have often been superficial or unsound critiques of mathematical knowledge, or confined to mathematical culture and the climate for women. Martin's framework allows knowledge, culture, and climate to be considered. In this review, instead of discussing the framework entirely in terms of the examples that Martin gives, I'll illustrate some of its categories for the case of mathematics. This illustration isn't meant to be a full-fledged critique of mathematics, but rather to suggest how the framework may lead us to think differently about the issue of gender and mathematics in academe.

The book begins with an example of the estrangement of women in academe from each other and from their forerunners. In the 1980s, feminist scholars moved from playing the "believing game" [6] with respect to each other's research, to accusing each other of essentialism, i.e., of assuming that women had an "immutable. eternal essence or nature." In particular, many prominent feminist scholars of the 1970s were accused of essentialism in the 1980s. Martin explains that she uses accusations of essentialism advisedly. After centuries of arguments based on "women's nature" and with new consciousness of how assumptions of uniformity mask individual differences, 1970s feminists were wary of essentialism. But, ironically, 1980s critics intimated "that one who speaks of 'gender identity' is committed to essentialism," and later "that women and gender are

... essentialist concepts or categories" [7]. With the categories "women" and "gender" condemned, concern about having one's research labeled essentialist created a chilly research climate for feminists. It was no longer acceptable to make statements about "women" without indicating their race and class. Martin notes that false generalization and generalization from an unrepresentative sample are definitely to be avoided and that studies of difference are important. But, "What could be more dangerous for women than to disregard similarities when different categories of women are being compared? ... These strategies accomplish the very thing that feminist scholars have wanted to avoid - representing women who belong to another race and class as the Other." Reinforcing the point that the essentialist label may sometimes be too hastily applied is bell hooks's observation that "she is often accused of being an essentialist when she cites her experience as a woman, but not when she cites her experience as an African American" [8].

Estrangement from women's lived experience as discussed by Martin is an interesting and useful category. I've seen it treated in rather simple-minded ways for the case of mathematics (that perhaps are indeed essentialist). Instead, Martin takes a much larger view, thinking of the relationship between theory (of the academy) and practice (of everyday life), the communications involved in that relationship, and the language involved in those communications. Martin identifies esoteric language as part of this divide. She does not mean that technical language is not needed, but she does mean that the user of technical language often seems unable to communicate to the rest of the world the ideas for which technical language is used. This is a problem sometimes bewailed in mathematics, but one whose solution does not appear to be a community concern. Within mathematics, we continue to have talks in which everyone can understand the first five or ten minutes, and proofs that are read by a few. This may be a necessary state of affairs (although counterexamples exist), but questions about making various fields of mathematics more comprehensible seem to remain marginal. Pushing Martin's point further, it seems that proving theorems is valued but there is little concern about making means of proof comprehensible to more [9], hence possibly less prone to error, although there is some concern about the correctness of proofs [10].

Estrangement from women's occupations, among them education, is Martin's third category. In US

mathematics, this estrangement is marked by the separation of the AMS and the MAA. The MAA was founded in 1916, "to serve the professional needs of the large community of teachers and students of advanced mathematics" [11]. The men and women of the MAA were to be concerned with teaching - an occupation which was at that time identified with females [12], partly due to the efforts of Horace Mann — but the "research men" of the AMS were concerned with research. MAA president John Wesley Young said in 1931,

I have . . . attempted to combat the attitude that would make of research a fetish, that proclaims that the only worthy function of a mathematician is research and that other activities are to be looked on with contempt [13].

Describing more recent times William Kirwan writes,

Indeed, we perpetuated the myth that everyone was doing research. God help the person who tried to take on some special assignment involving undergraduates. Rumors would start to buzz in the hall: "What's wrong with old Joe? His career must be on the skids." [14]

But does teaching and concern with education affect mathematics, i.e., research in mathematics? Research in history and education suggest that teaching can affect one's mathematical knowledge. Judith Grabiner gives evidence that a major factor in the late 18th century shift to more rigor in analysis may have been motivated by changed economic circumstances — mathematicians began to make their livings by teaching in educational institutions. Courses changed to include analysis rather than elementary mathematics and Euclid's Elements as had been the case previously [15]. Grabiner notes that until the late 18th century most of the foundational work in analysis occurred in "courses of lectures, in textbooks, or in popularizations" — not in scientific journals [16]. Research on teaching suggests that teaching can (depending on how it's done) change one's mathematical knowledge [17].

I don't wish to suggest that concern for teaching is feminist and concern for research is not. Instead I'm taking the view (as Martin does) that certain activities in certain times and places are associated with women, thus are part of the reason why those activities are avoided or performed in particular ways in male-dominated institutions. And, I'm suggesting that such an avoidance might have an effect on the nature of the mathematics that is done — what effect may be hard to imagine, just as the 18th century emphasis on rigor may have been hard to imagine in the 17th century. Such an avoidance might also affect the nature of the people doing that mathematics.

I've illustrated just a snippet of what Martin's category of estrangement suggests for mathematics — but this category is just the first third of the book. The second third discusses the filtering mechanism of higher education, and the remainder of the book discusses how academic institutions might be transformed. A main part of the filtering mechanism that is discussed is the "chilly climate" for female students and professors, which ranges from mild derision to death threats and car torching [18]. Martin reviews research, reports, and anecdote. Research on this subject, particularly in college classrooms, is hard to find, so her account relies also on anecdote and her own experiences. This may be a difficulty for skeptical readers. This paucity of research is in some ways related to causes of the chilly climate problem — research on college teaching is rare, funding for research concerning gender is limited, and so on. Martin also points out that the chilly climate can inhibit the asking of the "wrong" sorts of questions. This makes a very interesting connection between the nature of scholarship and the chilly climate.

Martin's discussion of chilly climate mentions some examples of unconscious bias, but it might also have mentioned the considerable literature on unconscious bias summarized by Virginia Valian in *Why So Slow?* Unconscious bias from well-meaning parties may help to make possible biased actions from those actively opposed to the presence of women. For example, those who don't find it surprising for women to fail to continue as students or faculty, will not think to ask if there is an individual or an institutional cause.

Martin takes an "immigrant interpretation" of women's situation in the academy, thinking of women as strangers in a promised land — a land with customs predicated on estrangement from women. (Her "mathematical" formulation might make AWM members wince, but this is a minor flaw.) In the final section of the book she discusses how these customs could be transformed. This is a very difficult task, and her suggestions for how it may be done concern individual and collective action rather than institutional remedies. One reason for this focus may be that colleges and

universities have done studies, documented cases of inequity, bias, or harassment, and sometimes even suggested remedies. Sometimes they result in movement toward equity, but often it seems they rest on the shelf or in the file cabinet. Reports of serious offences like faculty harassment or plagiarism can remain for years in an administrator's office collecting dust [19]. Sometimes the dust is disturbed and the file is read — if those aware of previous offenses are also aware of later ones.

One of Martin's suggestions for preventing and alleviating such events is the creation of feminist fikas on campus. Fika is a Swedish word for "coffee, cake, and conversation," which sounds something like morning and afternoon tea for students, faculty, and staff. Martin describes a feminist fika as creating an atmosphere that is safe for discussions of chilly climate incidents, great and small - not as "wallowing in victimhood," but as a possible source of collective knowledge and action. Certainly it seems as if individual reports are often discounted or disbelieved, so one wonders what would happen if the report of an individual was followed by a collective action such as a meeting of her supporters with the appropriate administrator. I suspect that the effectiveness of this sort of strategy depends a great deal on the particular circumstances of its implementation. For example, a graduate student at Cal Tech writes of one such attempt:

Shortly after arriving on campus, I started hearing about the bizarre undergraduate phenomenon called glomming, which involves a man or a group of men stalking a woman, usually a first-year student. The glommer might follow the woman to class, wait for her afterward, sit at her cafeteria table, or enter her dorm room and refuse to leave. Some men are e-glommers who send tons of e-mails, or constantly "finger" a woman's account to find out where she is logging in from....

I'm surprised at how some undergraduate women play down glomming and make excuses for it. Women recognize the culture of disrespect but are unwilling to rock the boat because they are afraid to be seen as man-haters. A few years ago, a small group of undergraduate women created "The Girl's Guide to Glomming," a short book for first-year women on how to protect themselves. They got funding from the administration for it, but the school forced the authors to make the guide's language gender-neutral and to change the title to "The Geek's Guide to Glomming," as though both

women and men were doing it. Still, many upperclass students were vehemently opposed to the guide, saying that it would bring negative press to Caltech. At one point, the e-mail account the authors had established for the guide was hacked. Finally, they gave up and stopped printing. [20]

Tolerance of glomming may have brought very negative press to MIT. Glomming or similar behavior appears to have played a major role in the recent suicide of an MIT undergraduate [21].

It may be worth noting that the Cal Tech attempt to help undergraduate women deal with glomming appears not to have included faculty or staff (contrary to Martin's suggestion). The strategy of publishing a guide may have failed in any case, but faculty and staff often have

the advantage of knowing the past history of administrators and their attitudes.

Some of Martin's other recommendations also concern establishing institutions to serve as mechanisms for communication of collective wisdom. For example, Heidi Weissmann received a large pretrial settlement for her suit concerning plagiarism of her articles (amazingly, even plagiarism of published articles). She vowed "to

share what I had learned," and with her settlement founded the Center for Women in Health and Health Care, whose purpose is to "provide practical support for women faced with discrimination, harassment, and other forms of gender misconduct."

Martin points out that Weissmann's center (and other forms of support such as the American Association of University Women's Legal Defense Fund) serve only to protect the gains that academic women have made. She recommends that feminist scholars "think big," beyond simple survival, to the establishment of "a community of public intellectuals, people who are doing very, very careful work but are concerned about reaching a wide audience, people who are concerned about the direction of the country and are trying to influence public perception, public policy," avoiding the traps that Martin has described [22]. Amazingly enough, such a center for feminist scholarship might come into existence soon. This spring Jane Fonda donated \$12.5 million to

Harvard to establish a Center on Gender and Education.

Rebecca West, a contemporary of Virginia Woolf, said, "I myself have never been able to find out precisely what feminism is; I only know that people call me a feminist whenever I express sentiments that differentiate me from a doormat." By this definition every woman who is a mathematician is also a feminist. Martin's description of feminism as "looking at the world as if all women mattered" and her recommendations for collective action suggest that feminism and women's education should be seen in terms of groups and institutions as well as individuals. Perhaps in this century, we will see institutional change — and perhaps women will be willing and welcome to join the procession of educated men.

Rebecca West ... said, "I myself have never been able to find out precisely what feminism is; I only know that people call me a feminist whenever I express sentiments that differentiate me from a doormat.

Notes

- 1. M. A. M. Murray, Women Becoming Mathematicians: Creating a Professional Identity in Post-World War II America, Cambridge, MA: MIT Press, 2000, p. 5; D. Q. Loftsgaarden, J. W. Maxwell, & K. R. Priestley, 2000 Annual Survey of the Mathematical Sciences (first report), Notices of the American Mathematical Society, 48(2), 195–208, February, 2001.
- 2. AAUP Fact Sheet, www.aaup.org/Wbellas.htm.
- 3. www.ncrw.org/research/scipress.htm.
- N. Radke Sharp & G. Sonnert, Women mathematics faculty: Recent trends in academic rank and institutional representation, *Journal of Women and Minorities in* Science and Engineering, 5(3), 1999. (Reprinted in AWM Newsletter, January–February 2001.)
- 5. For example, Women in mathematics, 1991–92, *Science*, 257, 323, July 17, 1992; P. Selvin, Mathematics: Heroism is still the norm, *Science*, 255, 1382–1383, March 13, 1992.
- The "doubting" and "believing" games are discussed in the book by Belenky et al., Women's Ways of Knowing, New York: Basic Books, 1986. These terms come from Peter Elbow's book, Writing Without Teachers, New York: Oxford University Press, 1973.
- Martin, p. 15. All other quotations from Martin appear without footnotes.
- 8. Steinem in Martin, foreword, p. xvi.

- 9. Here I'm thinking about "visual mathematics" work of Tristan Needham, Jon Barwise, etc.
- 10. P. Davis, Fidelity in mathematical discourse, in T. Tymoczko, Ed., New Directions in the Philosophy of Mathematics, Boston, Birkhäuser, 1986. Several other essays in this volume, for example, De Millo et al., discuss the idea that comprehensibility may aid in reducing errors in proofs (or objects that are claimed to be proofs).
- 11. Quotation from Murray, op. cit., p. 7.
- See, for example, J. K. Conway, Politics, pedagogy, and gender, in J. K. Conway, S. C. Bourque, & J. W. Scott, eds., *Learning About Women: Gender, Politics and Power* (pp. 137–152), Ann Arbor: University of Michigan Press, 1987.
- 13. Murray, op. cit., pp. 7-8.
- 14. www.maa.org/features/kir.
- See, for example, M. Mahoney, Chap. 1, The Mathematical Career of Pierre de Fermat, 2nd edition, Princeton University Press, 1994.
- 16. J. Grabiner, Is mathematical truth time-dependent? in T.

- Tymoczko, Ed., New Directions in the Philosophy of Mathematics, Boston, Birkhäuser, 1986.
- 17. See, for example, L. Ma's Knowing and Teaching Elementary Mathematics, Erlbaum, 1999.
- 18. Here, alas, are a few recent examples concerning students: www.boston.com/dailyglobe2/221/metro/MIT_will_probe _actions_in_case_that_preceded_suicide+.shtml; www. sfgate.com/cgi-bin/article.cgi?file=/news/archive/2001/02/ 02/national1134EST0546.DTL. For statistics on climate for faculty, see Recent Findings, The American College Teacher at www.gseis.ucla.edu/heri/heri.html. For more discussion of aspects of the chilly climate, see www. bernicesandler.com/id4.htm.
- 19. See, for example, F. Conley, Walking Out on the Boys, Farrar, Straus & Giroux, 1998, p. 233.
- 20. See "Ms goes to college" at www.msmagazine.com.
- 21. www.boston.com/dailyglobe2/221/metro/MIT_will_probe _actions_in_case_that_preceded_suicide+.shtml.
- 22. P. Applebome, *New York Times*, November 3, 1996; quoted in Martin, p. 175.

NSF-AWM TRAVEL GRANTS FOR WOMEN

The objective of the NSF-AWM Travel Grants program is to enable women to attend research conferences in their fields, thereby providing a valuable opportunity to advance their research activities and their visibility in the research community. By having more women attend such meetings, we also increase the size of the pool from which speakers at subsequent meetings may be drawn and thus address the persistent problem of the absence of women speakers at some research conferences.

<u>Travel Grants</u>. These grants provide full or partial support for travel and subsistence for a meeting or conference in the applicant's field of specialization. A maximum of \$1000 for domestic travel and of \$2000 for foreign travel will be applied. For foreign travel, US air carriers must be used (exceptions only per federal grants regulations; prior AWM approval required).

Eligibility. These travel funds are provided by the Division of Mathematical Sciences of NSF, and the research conference must be in an area supported by DMS. For example, this includes certain areas of statistics, but excludes most areas of mathematics education and history of mathematics. Applicants must be women holding a doctorate (or equivalent experience) and having a work address in the US (or home address, in the case of unemployed mathematicians). Anyone who has been awarded an AWM-NSF travel grant in the past two years, or who has *any* sources of funding from a governmental agency (for example, NSF, NIH, ONR, DOD, or NSA), is ineligible. Partial travel support from the applicant's institution or from a non-governmental agency does not, however, make the applicant ineligible; the availability or possibility of such partial support should be indicated in the applicant's budget.

Target dates. There are three award periods per year (2002 dates pending final funding approval). An applicant should send five copies of 1) a cover letter, including the conference name, conference dates and location (city/state/country), and amount of support requested, 2) a description of her current research and of how the proposed travel would benefit her research program, 3) her curriculum vitae, 4) a budget for the proposed travel, and 5) information about all other sources of travel funding available to the applicant to: Travel Grant Selection Committee, Association for Women in Mathematics, 4114 Computer & Space Sciences Building, University of Maryland, College Park, MD 20742-2461. If you have questions, contact AWM by phone (301-405-7892) or email (awm@math.umd.edu). Applications via email or fax will not be accepted. The 2002 deadlines for receipt of applications are February 1, April 1, and October 1.

AWM WORKSHOP FOR WOMEN GRADUATE STUDENTS AND RECENT PH.D.'S

supported by the Air Force Office of Scientific Research, the Office of Naval Research, and the Association for Women in Mathematics

Over the past thirteen years, the Association for Women in Mathematics has held a series of workshops for women graduate students and recent Ph.D.'s in conjunction with major mathematics meetings.

WHEN: An AWM Workshop is scheduled to be held July 8–10, 2002, with an introductory dinner. This workshop is to be held in conjunction with the 50th Anniversary of the Society for Industrial and Applied Mathematics (SIAM) and the SIAM Annual Meeting (July 8–12, 2002) at the Philadelphia Marriott Hotel, Philadelphia, PA

FORMAT: The workshop will consist of a poster session by graduate students and two or three minisymposia featuring selected recent Ph.D.'s, plus an informational minisymposium directed at starting a career. The graduate student poster sessions will include all areas of research, but each minisymposium will have a definite focus, to be selected from the research areas of Mathematical Biology, Modeling, Control, Optimization, Scientific Computing, and PDEs and Applications. All mathematicians (female and male) are invited to attend the program. Departments are urged to help graduate students and recent Ph.D.'s to obtain some supplementary institutional support to attend the Workshop and the associated meeting.

DISCUSSION GROUP LEADERS: We also seek volunteers to lead discussion groups and to act as mentors for workshop participants. If you are interested in volunteering, please contact the AWM office.

ELIGIBILITY: To be eligible for selection and funding, a graduate student must have begun work on a thesis problem. Her application should include a cover letter, a one to two page summary of her work, the title of the proposed poster, a curriculum vitae, and a supporting letter of recommendation from a faculty member or research mathematician who knows her research. To be eligible for selection and funding, a recent Ph.D. will have received her Ph.D. within approximately the last five years (whether or not she currently holds a postdoctoral or other academic position). Her application should include a cover letter, a title and abstract (75 words or less) of the talk (to be given if accepted), a one to two page summary of her work, and a curriculum vitae; it is recommended but not required to include a supporting letter of recommendation from a faculty member or research mathematician who knows her research. All non-US citizens must have a current US. address. All selected and funded participants are invited and strongly encouraged to attend the full AWM two-day program. Those individuals selected will be notified by the AWM Office and will need to submit a title and abstract (75 words or less) with name, affiliation, address, etc. by mid-February to SIAM for the meeting program; AWM will provide instructions when notified.

Send five complete copies of the application materials (including the cover letter) to:

Workshop Selection Committee Association for Women in Mathematics 4114 Computer & Space Sciences Building University of Maryland College Park, Maryland 20742-2461

Phone: 301-405-7892

Email: awm@math.umd.edu URL: www.awm-math.org

APPLICATION DEADLINE: Applications must be received by **January 21, 2002**. Applications via email or fax will not be accepted.

EDUCATION COLUMN

I don't know what the state of the world will be when this newsletter comes out. I am writing in mid-September, and things are feeling pretty bleak. So when a meeting last week on a matter involving both mathematics and education provided a ray of light that penetrated my fog, I decided to turn its content into this month's column.

To do so requires a certain amount of filling in of background. For a start, as I suspect I have mentioned before, I have the good fortune to be one of the co-Principal Investigators of an NSF project entitled Expanding the Community of Mathematics Learners. The project works with elementary school teachers from six different school districts around Lake Washington, which means that decision-making meetings involve representatives of the University of Washington's Mathematics Department, College of Education and Outreach Program and of each of the six school districts. A goodly gathering, and as it turns out a remarkably compatible one.

Having a balanced group from university and schools is a good start, and the ambition to Do Something for elementary mathematics teaching is a good goal. On the other hand, even in combination they are far from sufficient for guaranteeing any results at all. So what is it we do? That's where our good fortune really shines forth. We have in our midst two people who have been heavily involved with the development of the DMI materials, and with their expertise we have been able to make those materials central to our entire project.

And that statement requires me to fill in yet another layer of background. What are DMI materials? The letters stand for Developing Mathematical Ideas, and the materials have the underlying goal of helping elementary teachers to view the art of teaching mathematics as doing exactly that — developing their students' mathematical ideas —and of enabling them to teach accordingly. The materials originally grew out of Summermath for Teachers at Mt. Holyoke and have since, with support from the NSF and the Educational Development Center, been formalized and published. They now appear as a series of modules, each containing the wherewithal for eight to ten three-hour seminars. In each seminar participants try

out a mathematical idea and discuss it, then study and discuss cases from classrooms where children grapple with that idea, then bring in and discuss some of their own students' work with the same idea. Extremely powerful and engaging seminars, and exciting to work with.

These, then, became the centerpiece of our project. Since the seminars are by far the most effective when run by someone who is, or has been, a K-12 teacher, we set up a pyramid structure for developing facilitators an awe-inspiring organizational effort for which I can claim no credit whatever. That's not enough, though, A lot of forms of leadership from within are needed to keep things going, so we built in some leadership training. And any progress in working with elementary school teachers needs to be supported by work to strengthen their mathematical foundations. The seminars do some of that, but in addition we run summer institutes with a more direct focus on mathematical underpinnings. Furthermore any project working with teachers which fails to keep communications going with their administrators is doomed, so that also figures in our planning. Massive effort? Yes, indeed!

Last week we had the first organizational meeting of the year. Being in a room full of trusted, trusting and mutually appreciative people with a common goal was a good start on easing the week's bleakness. We spent a little time enjoying that. Then we settled in for the crunch. This is the beginning of our third year. The honeymoon is over, and the enthusiastic teachers who can be depended on to volunteer for things are already mostly involved. So we braced ourselves for tales of difficulties in recruiting new teachers, of undersubscribed seminars and of fading interest at the upper administrative levels. Instead of which all the reports were of difficulties supplying enough seminars to take care of teachers who are champing at the bit to get into one, and of the need to supply extra seminars for the collection of school principals who want to be better attuned to what their teachers are so enthusiastic about. At the administrative level there is indeed work to be done (only one of the six districts still has the superintendent who signed the grant proposal) but far the most dramatic tale came from a district in such serious financial straits that it has

by Column Editor Ginger Warfield, Department of Mathematics, University of Washington, Seattle, WA 98195; warfield@math.washington.edu

cancelled every project with the sole exception of ECML ("and we came within a gnat's whisker," said the district representative).

Of course there were downsides. A major one is unrealistic time expectations. For one thing, teachers who have set themselves the goal of keeping a class moving mathematically forward fuelled by their students' ideas tend to expect themselves to reach that goal in a few weeks. In fact, it is a slow process requiring a lot of support. For another, a prevailing hazard in any educational setting is the public perception that a change that the schools have just started implementing in one month should produce massive rises in students' test scores the following month, and we're not immune to that hazard. We'll have to keep working around it.

But the downsides were not the dominant content of the meeting. Neither were sundry technical discussions and decisions, though they are always important. For me at least, what dominated the meeting was the dawning conviction that the idea of having a positive mathematical impact on more than a thousand classrooms in more than a hundred elementary schools may be a dream, but it is a dream that can be realized, and in fact is even beginning to be realized.

TRAVEL GRANT ADVICE

The Association for Women in Mathematics has administered the NSF-AWM Travel Grant Program for Women since 1988, supporting both travel to domestic or foreign research conferences and, more recently, longer-term visits with a mentor. The Program continues to attract applicants of exceptional quality, and it is always the case that many deserving applicants cannot be funded. On average, only a third of those applying can be supported.

Several years ago, a selection committee provided some advice to applicants through the AWM *Newsletter*. We felt that with the mentoring program now in place, we should update this advice. In many respects, of course, the factors affecting funding decisions have not changed.

Beverly Diamond, College of Charleston

The purpose of the travel grants is to enhance the research activities of women mathematicians and increase their visibility in various research venues.

The research proposal is important. The research itself should be of high quality, and the proposal should give a clear, concise explanation of results, reasonably understandable to a lay mathematician. In what way did your work go beyond what was known? What are the connections to and implications for other results or open questions?

If you are applying for a conference travel grant: What are the expected benefits of attending the conference? Who are the major speakers? How close is the conference to your research area? Will there be opportunities to discuss mathematics, and are there specific people with whom you expect to confer? Are you giving a talk, or does the nature of the conference preclude that?

If you are applying for a mentoring travel grant: Is the proposed mentor appropriate (a senior mathematician with an established research record in your research area)? Have you already established a preliminary working relationship? How enthusiastic is the mentor about the proposed visit?

You should provide a detailed and realistic budget, with information on the most economical fares (on US carriers), etc. State clearly any other sources of funding — any sort of personal grant from a federal agency is likely to make you ineligible, but partial support from your institution is allowed. Don't pad your budget in an attempt to reach the maximum allowed level of funding or under the assumption it will automatically be cut. Decisions on the level of funding provided to successful applicants are based both on funds available to the panel and on our evaluation of whether the level requested was appropriate.

PRE-ICM TRIP TO CHINA

Prior to the events of September 11, AWM had been in discussions with the Citizen Ambassador Program of People-to-People International about a pre-conference trip for AWM members to the People's Republic of China, where the International Congress of Mathematicians (ICM) will be held in Beijing, August 20–28,

2002. The tentative program includes visits to schools, universities and a woman's organization for professional exchanges on issues concerning women and girls in mathematics.

At the time this *Newsletter* goes to press, People-to-People is assessing their projects and planning has been put on hold. Nevertheless, it is important for AWM members to be aware of the possibility of this project so that those interested in participating will have sufficient time to plan funding requests.

As soon as the status of the project becomes definite, another announcement will be made. In the meantime, those interested may contact Pao-sheng Hsu at hsupao@maine.edu or hsupao@nemaine.com.

OPPORTUNITIES

Project NexT Poster Session

Don't forget the Project NExT/Young Mathematician's Network Poster Session in San Diego. See the ad in the last issue of the AWM Newsletter. The deadline for submissions is **December 11, 2001**. For more information, contact Ken Ross at ross@math.uoregon.edu or Kevin Charlwood at zzcharlw@washburn.edu.

MAA Project NExT Panel Discussions

These sessions were organized by the 1994–97 Project NExT Fellows to address issues of concern to faculty who have four to ten years of teaching experience. All meeting participants are invited to attend.

Introduction to the Hiring Process: Preparation, Execution, and Follow-up will be held Sunday, January 6, 2:15 to 3:30 P.M. Its organizers are sarah-marie belcastro, University of Northern Iowa and Bowdoin College, smbelcas@math.uni.edu and Dusty Sabo, Southern Oregon University, Sabo@sou.edu. Many institutions expect to have faculty openings in the near future. At some institutions, it has been a long time since there was a search; at other institutions, newer faculty are becoming involved in their first hiring committees. Our panel discussion (hopefully with lots of audience participation!) aims to help faculty become aware of the issues involved in hiring new colleagues. We will

discuss how the departmental environment and direction can frame a search. The bulk of the allotted time will be spent discussing the mechanics of a search (from writing the position advertisement, to informal interviews, to campus interviews). How to make a search a lasting success by mentoring new department members will be briefly discussed.

Successful Programs that Integrate Mathematics with Other Disciplines will be held Monday, January 7, 2:15 to 3:45 P.M. Its organizers are Timothy D. Comar, Benedictine University, IL, timcomar@hotmail.com and Michael Dorff, Brigham Young University, UT, mdorff@math.byu.edu. The panelists will discuss their successful programs and projects that are designed to enrich undergraduate education by integrating mathematics with other disciplines and will provide advice for initiating interdisciplinary activities.

Time for Your First Sabbatical ... Now What? Will be held Tuesday, January 8, 9 to 10:15 A.M. Its organizers are Cheri Boyd, Nazareth College, NY, clboyd@naz.edu and Mark Parker, Carroll College, MT, MParker@carroll.edu. We all look forward to the sabbatical periods in our careers with great anticipation. These opportunities for renewal and invigoration can take on many forms. Research, curricular development and writing are only a few options. Our panelists will describe a broad array of sabbatical experiences from start to finish: generating worthy ideas, writing successful proposals, garnering support, carrying through and following up.

AAAS Meeting

The 2002 Annual Meeting of the American Association for the Advancement of Science, February 14–19 in Boston will feature many outstanding expository talks by prominent mathematicians. These include the following three-hour symposia (and organizers) sponsored by Section A (Mathematics) of the AAAS: Robot Arm Manipulation (Robert Connelly, Cornell University), Articulation in Mathematics: Smoothing the Bumps from School to College (Bernard Madison, MAA), Bioconsensus (Fred Roberts, Rutgers University), Living with Data: Achieving Quantitative Literacy (Lynn A. Steen, St. Olaf College), Waves: Patterns and Turbulence (Walter Craig, McMaster University), Show Me

Warren Page, Secretary of Section A, AAAS

the Data! Fiascos in Modeling and Statistics: Florida, Ford & Firestone, etc. (Leon Seitelman, University of Connecticut), Getting from Here to There: Mathematical Models for Movement and Aggregation of Cells and Organisms (Hans Othmer, University of Minnesots), and Topical Talk "Hard Number Theory Problems and Cryptology" (Carl Pomerance, University of Georgia).

Other symposia that will be of interest to the mathematical community include: Advanced Science and Mathematics in American High Schools; The New Computing I, II; Teaching and Learning in Science and Mathematics: What Does Discipline-Based Education Research Tell Us?; Mathematics and Science of Origami: Visualize the Possibilities; and Equal Access to Science, Mathematics, and Technology Education is a Human Right that Belongs to All.

The symposia above are only a few of the 150 or so AAAS program offerings in the physical, life, social, and biological sciences. For details of the 2002 AAAS program, see the October 26, 2001 issue of Science.

AAAS annual meetings are the showcases of American Science, and they encourage participation by mathematicians and mathematics educators. (AAAS acknowledges the AMS for its generous support.) In presenting mathematics-related themes to the AAAS Program Committee, I have found the committee to be genuinely interested in offering symposia on mathematical topics of current interest. Thus, Section A's Committee seeks organizers and speakers who can present substantial new material in an accessible manner to a large scientific audience. Toward this end, I invite you to attend our Section A Committee business meeting 7:30-10:30 P.M., Friday, February 13, 2002 in the Yarmouth Room of the Marriott Copley Place. I invite you also to send me, and encourage your colleagues to send me, symposia proposals for future AAAS annual meetings.

Cathey Kessel has sent us titles of other symposia of potential interest to AWM members: Women in Science: Shattering the Glass Ceiling (Saeqa Dil Vrtilek, Harvard-Smithsonian Center for Astrophysics and Gerhard Sonnert, Harvard University); A New Look at Barbara McClintock and Rosalind Franklin (Margaret Rossiter, Cornell University); Discipline-Based Education Research in Science and Mathematics (Lillian C. McDermott, University of Washington); Testing and University Admissions (Thomas J. Tighe, University of South Florida and Claude M. Steele, Stanford

University); Gender in Science, Mathematics and Engineering Faculty Hiring and Retention? (Alice M. Agogino, University of California-Berkeley and Shirley M. Malcom); and Topical Lecture "Why So Slow? The Advancement of Women" (Virginia Valian).

AAUW Career Development Grants

The American Association of University Women (AAUW) Educational Foundation gives Career Development Grants in amounts from \$2,000 to \$8,000. Applications are available until December 1; the application postmark deadline is December 15, 2001. The grants support women who hold a bachelor's degree and are preparing to advance their careers, change careers, or reenter the work force.

The AAUW Educational Foundation also gives a variety of other fellowships and grants. For more information, visit www.aauw.org.

Council on Undergraduate Research Conference

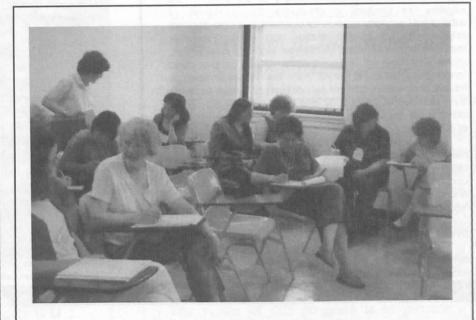
The CUR National Conference will be held at Connecticut College, New London, CT, June 19-22, 2002. The overall theme is "Undergraduate Research for All", with special workshop threads on: What Is Undergraduate Research?; Is Undergraduate Research for All?; How Are Research-Active Faculty and Undergraduates Supported? - Campus Environment and Infrastructure, funding opportunities; Special Research Responsibilities Symposium — Ethical, Legal, And Social Implications of Research with Udergraduates (co-sponsored by Sigma Xi); How Is Undergraduate Research Assessed? - Criteria and Strategies, including special workshops and a forum on "Assessing the Institutional Environment for Undergraduate Learning"; and a Funding Fair where attendees meet with program officers informally.

There is plenty at CUR 2002 for everyone: administrators, faculty, and graduate students, particularly those seeking employment at primarily undergraduate institutions. Anyone who wants to do research while working to improve undergraduate education will benefit. This year for the first time, we will have specific offerings for persons in the social sciences as well as all the natural sciences, mathematics, and engineering. For further information, online registration, and details on how to submit a workshop proposal or poster application, visit www.cur.org/ conferences.html.

AWM AT MAA MATHFEST AUGUST 2001, MADISON



Pat Shure (University of Michigan), 2001 Hay Award Winner, delivering the AWM-MAA MathFest Lecture



"WOMEN COUNT"ing the number of drops in a bucket



Expanding the Vision: Increasing the Participation of Women in Mathematics: Back row: Viji Sundar (Cal State Stanislaus), Virginia Kasten (General Motors), Genevieve Knight (Coppin State College), Suzanne Lenhart (Tennessee; Oak Ridge National Lab); Front: Elizabeth Yanik (Emporia State), Kathleen Sullivan (Seattle University), Florence Fasanelli (Tensor Foundation)



Verifying the mathematical estimates for the time to fill the bucket

DIVERSITY IN MATHEMATICS EDUCATION: CENTER ON LEARNING AND TEACHING



Doctoral and Postdoctoral Fellowships

The University of Wisconsin-Madision, University of California at Berkeley, and University of California at Los Angeles are pleased to announce the availability of substantial long-term support for doctoral and post-doctoral fellows who will pursure studies and research on the mathematics education of diverse learning populations, along the lines of race/ethnicity, class, gender, and language. Under a grant from the National Science Foundation, we will accept two cohorts of fellows to begin their work in the fall of 2002 and 2003, respectively. Each campus will appoint five fellow per cohort (for a grand total of 30 fellows).

To receive a fellowship from an institution, an applicant must be accepted to that institution's program. Fellowship offers for fall 2002 will be made beginning February 15, 2002 and will continue until all fellowships have been awarded and accepted. To insure that an application receives the fullest consideration possible by an individual campus, the complete application should be submitted to that campus by no later than January 15, 2002.

Competition of National Science Foundation fellowships is open to United States citizens or permanent residents at the time of application.

FOR FURTHER INFORMATION, PLEASE CONTACT ONE OF THE COLLABORATING INSTITUTIONS:

PROFESSOR THOMAS P. CARPENTER, ASSOCIATE DIRECTOR, DIME/CLT (C/O CHRIS KRUGER) Department of Curriculum & Instruction University of Wisconsin-Madision 225 North Mills Street, Madision, WI 53706-1795 PHONE: 608-263-5141 E-MAILS: tpcarpen@facstaff.wisc.edu, kruger@mail.soemadison.wisc.edu

ASSOCIATE PROFESSOR MEGAN L. FRANKE, ASSOCIATE DIRECTOR, DIME/CLT (C/O CHERYL BATISTE) Graduate School of Education and Information Sciences, University of California, Los Angeles Los Angeles, CA 90095-1521

PHONE: 310-825-4910 E-MAIL: mfranke@ucla.edu

kate@socrates.berkeley.edu

PROFESSOR ROGERS HALLS. ASSOCIATE DIRECTOR. DIME/CLT (C/O CD AREA ASSISTANT KATE CAPPS) Graduate School of Education 4533 Tolman Hall, University of California, Berkeley, Berkeley, CA 94720-1670 PHONE: 510-642-4207 E-MAILS: rhall@socrates.berkeley.edu

DIME/CLT WEB SITE: www.wcer.wisc.edu/dime

DEPAUL UNIVERSITY School of Computer Science, Telecommunications and Information Systems

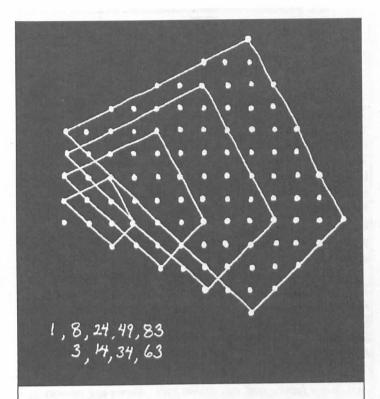
The School of Computer Science, Telecommunications and Information Systems (CTI) of DePaul University invites applications for multiple tenure-track positions beginning September 2002. We welcome applications from outstanding applicants in all areas of specialization. CTI is a young and growing school in downtown Chicago, with a wide range of degree programs. Undergraduate programs include Computer Science, Information Systems, E-Commerce Technology, Human-Computer Interaction, Network Technology, and Computer Graphics and Animation. Graduate programs at the Masters level include Computer Science, Telecommunications, E-Commerce Technology, Information Systems, Distributed Systems, Human-Computer Interaction, Computer Graphics and Animation, Software Engineering, and Management Information Systems. CTI also offers a Ph.D. program in Computer Science. CTI currently has over 80 full-time faculty and a student body growing at a rate of approximately 20% per year.

By bringing together faculty from various areas in computing, mathematics, and information technology and by placing them in the Loop -- the heart of Chicago's business and financial district -- DePaul has established a unique, dynamic, and entrepreneurial school. CTI rewards excellent teaching, provides strong support for research, and encourages creative applied scholarship.

Computer science faculty are actively pursuing research in a wide variety of areas, including artificial intelligence, computational complexity, computer vision, databases, distributed computing, foundations of programming languages, graphics, human computer interaction, information retrieval, intelligent agents, parallel and distributed algorithms, quantum computation, software engineering, and web data mining. Interdisciplinary and collaborative research is common, and weekly seminars in many areas including theoretical computer science, programming languages, and humancomputer interaction help foster such work.

DePaul draws students of many backgrounds and cultures from a diverse urban setting. Thus, CTI is interested in recruiting and maintaining a diverse group of faculty. Faculty from over twenty-one countries teach at CTI, women currently comprise 20% of the full-time faculty, and CTI faculty earned Ph.D.'s in more than nine areas including mathematics, nuclear physics, and philosophy. Members of all underrepresented groups, women, veterans, and persons with disabilities are invited and encouraged to apply. Candidates should have a Ph.D. in a relevant field by the date of appointment. To apply, complete the online application form (at www.cti.depaul.edu) and send a curriculum vita, a teaching statement, a research statement and at least three letters of reference to: Faculty Search Committee, School of Computer Science, Telecommunications and Information Systems, DePaul University, 243 South Wabash Avenue, Chicago, IL 60604-2301. Email: faculty_search@cti.depaul.edu. Electronic submission of documents is strongly encouraged. Applications will be accepted until positions are filled.

DePaul University is committed to equality in educational and employment opportunities.



Intrigued?

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Department of Industrial and Systems Engineering

Industrial Systems and The Engineering department at Lehigh University recently received a multi-million dollar IGERT doctoral fellowship award from the National Science Foundation (NSF) in the area of Global Manufacturing Logistics. The fellowship supports Ph.D. study in a joint program between the ISE Department at Lehigh University, and the Wharton School at the University of Pennsylvania. The vision of this program is to provide a unique Ph.D. experience that prepares students to become leaders in manufacturing logistics either in industrial or academic settings.

To make this program a success, we are seeking highly qualified students from a broad set of disciplines in mathematics, engineering, science, operations research, business, economics, and other related areas. The fellowship includes a monthly stipend, tuition, as well as international and industry internship travel expenses. U.S. citizenship or permanent residence status is required.

For more information visit our web site at http://www.lehigh.edu/inime/igert, or contact Ann Warnecke, Program Coordinator, at amw2@lehigh.edu or Dr. S. David Wu, Program Director, at david.wu@lehigh.edu.

DIRECTOR, PROGRAMS & SERVICES Mathematical Association of America Washington, D.C.

The Mathematical Association of America seeks a Director for Programs and Services to begin by July 2002. The Association, with 30,000 members, is dedicated to the advancement of mathematics, particularly at the collegiate level. The Director will oversee member services which include professional development activities; program development; support of member run activities, including those of committees, sections, and special interest groups; grant management & support; preparation & submission of proposals to foundations and government agencies. Appointments are for two to three years and may be renewed for multiple years.

Candidates should hold a doctorate or the equivalent in a mathematical science or mathematics education and at least six years of experience as a collegiate faculty member. A candidate should have successful experiences in all or most of the following areas: grant proposal writing & project management; administration; improvements of teaching & learning; and MAA committees, sections, or programs.

The deadline for submission of applications is January 21, 2002. Candidates should send a resume and letter of interest to: Ms. Julie Kraman, Mathematical Association of America, 1529 18th Street, N.W., Washington, DC 20036. Applications may be submitted electronically to jkraman@maa.org. References will be requested after review of applications. Applications from individuals from underrepresented groups are encouraged. Additional information on this position, the MAA and its programs and services may be found on MAA's website: www.maa.org and in the October issue of FOCUS. AA/EOE.



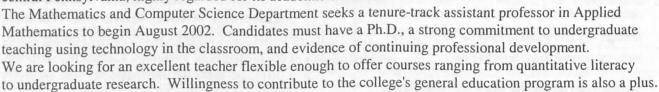
The Department of Mathematics and Statistics in the College of Arts and Sciences at American University is seeking applicants for the following position to begin in Fall 2002: **Tenure track Assistant Professor of Mathematics.** Ph.D. in Mathematics required. Qualified candidates will have evidence of effective teaching and scholarship. Responsibilities include teaching undergraduate and graduate level courses; advising students; conducting research; and participating in department, college, and university service activities.

Applications will be reviewed beginning October 15, 2001 & continuing until the position is filled. Applicants should send vitae and three letters of recommendation to: Search Committee, Department of Mathematics and Statistics, American University, 4400 Massachusetts Avenue N.W., Washington D.C. 20016-8050.

American University is an EEO/AA employer committed to a diverse faculty, staff, and student body. Women and minority candidates are strongly encouraged to apply.

Assistant Professor of Mathematics

Juniata College is a private, co-educational, liberal arts college in central Pennsylvania, highly regarded for its academic excellence.



Additional information on the college, the departments, and its facilities are available at www.juniata.edu. Juniata is committed to gender and cultural diversity and encourages women and minorities to apply.

Please send letter of application, vita, evidence of teaching abilities, graduate transcripts, and three letters of recommendation to Ms. Gail Leiby Ulrich, Director of Human Resources, Juniata College, Box R, Huntingdon, PA 16652. Review of applications will begin on December 15, 2001. Preliminary interviews will take place at the Joint Mathematics Meetings in January. Informal inquiries can be directed to Sue Esch, Chair, MACS Department, esch@juniata.edu.



Association for Symbolic Logic ASL Travel Awards

Awards for Students and Recent Ph.D's. In 2002 the ASL will again make available modest travel awards to graduate students in logic and (for the European Summer Meeting only) to recent Ph.D's so that they may attend the 2002 ASL Annual Meeting in Las Vegas, Nevada, or the 2002 ASL European Summer Meeting in Münster, Germany. To be considered for a Travel award, please (1) send a letter of application, and (2) ask your thesis supervisor to send a brief recommendation letter. The application letter should be brief (one page) and should include (1) your name, (2) your home institution, (3) your thesis supervisor's name, (4) a one-paragraph description of your studies and work in logic, (5) your estimate of the travel expenses you will incur, (6) (for citizens or residents of the USA) citizenship or visa status, and (7) (voluntary) indication of your gender and minority status. Only modest awards will be possible, partially covering travel costs and perhaps some of the living expenses during the meeting. Women and members of minority groups are strongly encouraged to apply. In addition to funds provided by the ASL, this program of travel awards is supported by a grant from the US National Science Foundation; NSF funds may be awarded only to students at US universities, and to citizens and permanent residents of the USA. Air travel paid for using NSF funds must be on a US airline. For both meetings, application by email is encouraged; put "ASL travel application" in the subject line of your message.

For the 2002 ASL Annual Meeting, applications and recommendations should be received before the deadline of March 15, 2002, by the Program Chair: Theodore Slaman, Department of Mathematics, University of California Berkeley, Berkeley, California 94720; email: slaman@math.berkeley.edu.

For the 2002 ASL European Summer Meeting, applications and recommendations should be received before the deadline of April 1, 2002, by the Organizing Committee: Institut für Mathematische Logik und Grundlagenforschung, Logic Colloquium 2002, Einsteinstrasse 62, D-48149 Muenster, Germany; email: 1c2002ms@math.uni-muenster.de.

2002 ASL Annual Meeting. June 1–4, 2002, Las Vegas, Nevada. Abstracts of contributed talks from ASL members should be received before the deadline of February 15, 2002, by the ASL office.

2002 ASL European Summer Meeting. August 3–10, 2002, Münster, Germany. Abstracts of contributed talks must be received by the deadline of May 1, 2002; they should be sent by email to lc2002ms@math.uni-muenster.de or by mail to Institut für Mathematische Logik und Grundlagenforschung, Logic Colloquium 2002, Einsteinstrasse 62, D-48149 Muenster, Germany.

ASL, Box 742, Vassar College 124 Raymond Ave., Poughkeepsie, NY 12604 email: asl@vassar.edu; Fax: 845-437-7830 Also visit the ASL web site: http://www.aslonline.org.

Department Head



DEPARTMENT OF MATHEMATICS Eastern Michigan University

Eastern Michigan University invites nominations and applications for the position of Head of the Department of Mathematics. The appointment will be at the rank of professor with tenure and will be effective August 1, 2002. EMU is located in Ypsilanti, MI (10 miles from Ann Arbor and 30 miles from Detroit) with a total enrollment of approximately 24,000. The Department offers undergraduate degrees concentrations in mathematics, mathematics education (both elementary and secondary), and statistics plus a joint actuarial science concentration with the Department of Economics. The Department also offers master's degrees in mathematics, mathematics education and statistics as well as a joint degree with the Department of Computer Science. Candidates for the position of Head of the Department of Mathematics should possess a Ph.D. in mathematics, an established record of research/scholarly activity, and university/professional service appropriate for a tenured appointment at the rank of professor. Candidates should also demonstrate effective leadership that includes good communication and administrative skills. Additionally, the candidate should be actively supportive of innovative technological and pedagogical initiatives that promote the Mathematics Department's goal for teaching excellence. information can be found at http://www.math.emich.edu and at http://www.emich.edu.

To apply, please send a vita, a letter of application, a separate statement that describes the applicant's approach to the responsibilities of a department head, and four letters of recommendation to: Posting #APAA 0203, Eastern Michigan University, 202 Boone Hall, Ypsilanti, MI 48197.

Applications will be considered until the position is filled. Completed applications (including letters of recommendation) received by Jan. 15, 2002 will be assured of full consideration. Applications are strongly encouraged from members of groups that are traditionally underrepresented in mathematics. An Affirmative Action/Equal Opportunity Institution.



Franklin W. Olin College of Engineering

Faculty Position - Mathematics

Franklin W. Olin College of Engineering invites applications for position(s) at any level in applied mathematics, discrete mathematics, theoretical computer science, and/or statistics to aid in the development of an applied mathematics program. Preference will be given to candidates whose backgrounds are in applications of mathematics to scientific or industrial problems, numerical methods, applied dynamics, discrete mathematics (including applications in cryptography, theoretical computer science, information technology or computer engineering) and in statistics (particularly stochastic modeling or data analysis). The College is seeking exceptional faculty dedicated to exemplary undergraduate teaching and committed to innovation, research, and intellectual vitality through various creative endeavors. Candidates must be willing to supervise undergraduate research and work with others in the development of the College's programs.

Franklin W. Olin College of Engineering is a new institution that strives to provide the best and most innovative engineering education to the world's brightest and most enterprising students. The curriculum development process is underway with 30 exceptional high-school graduates, called Olin Partners, whose interest in science and engineering is balanced by their interests in entrepreneurship and the fine arts. These students, more than one-third of whom are National Merit Finalists, will be part of the first entering class in Fall 2002, which has an anticipated size of approximately 75. The College expects a final enrollment of about 650 students, all of whom will receive four-year, full-tuition scholarships. The College is located in Needham, MA, adjacent to Babson College, with convenient access to Boston and the Route 128 high-technology sector.

Applicants should send a curriculum vitae, a description of their teaching philosophy and experience, a description of their current research program, and arrange to have three letters of recommendation sent to: Mathematics Faculty Search, c/o Dr. David V. Kerns, Jr., Provost, Franklin W. Olin College of Engineering, MS-MA, 1735 Great Plain Avenue, Needham, MA 02492-1245. Email: facultysearch@olin.edu

Preference will be given to applications completed by January 10, 2002, but applications and nominations will be considered until all open positions are filled.

The Franklin W. Olin College of Engineering is an Equal Opportunity Employer.

For more information visit: www.olin.edu

College of Saint Benedict # Saint John's University Mathematics - Term Position

The joint department of Mathematics seeks candidates for one term position to begin Fall 2002. A strong commitment to undergraduate teaching in a liberal arts setting is essential. The preferred candidate will teach a range of mathematics courses to general education students and possibly majors and minors. Ph.D. in mathematical sciences is strongly preferred. The department is supported by a separately staffed Mathematics Skills Center for remediation.

We have 13 full-time faculty members, and we graduate approximately 20 majors annually. Additional information about the institutions and the department may be found on our website: http://www.csbsju.edu. St. John's University, a liberal arts college for men, and the College of St. Benedict, a liberal arts college for women, are located four miles apart in Central Minnesota just outside metropolitan St. Cloud and 70 miles from Minneapolis. Both are Catholic colleges in the Benedictine tradition, which emphasize quality teaching and a commitment to intercultural learning.

Send letter of application, curriculum vita, three recent letters of recommendation, statement of teaching philosophy, copies of transcripts (official transcripts required for interview) to: Human Resources Coordinator, College of Saint Benedict, 37 S. College Ave, St. Joseph, MN 56374, mergen@csbsju.edu.

Applications received after January 15, 2002 cannot be guaranteed consideration. Women and people of diverse racial, ethnic, and cultural backgrounds are encouraged to apply.

The College of Saint Benedict/Saint John's University are EEO/AA employers.

Enhancing Diversity in Graduate Education (EDGE)

Preliminary Announcement: Funding for this program has been requested.

This program, is designed to strengthen the ability of women and minority students to successfully complete graduate programs in the mathematical sciences.

The summer program consists of two core courses in analysis and algebra/linear algebra. There will also be minicourses in vital areas of mathematical research in pure and applied mathematics, short-term visitors from academia and industry, guest lectures, graduate student mentors, and problem sessions. In addition, a follow-up mentoring program and support network will be established with the participants' respective graduate programs. Applicants to the program should be women in one of the following areas (i) graduating seniors who have applied to graduate programs in the mathematical sciences, (ii) recent recipients of undergraduate degrees who are now entering graduate programs, or (iii) first-year graduate students. All applicants should have completed standard junior-senior level undergraduate courses in analysis and abstract algebra and have a desire to earn a doctorate degree. Women from minority groups who fit one of the above three categories are especially encouraged to apply. Final acceptance to the program is contingent upon acceptance to a graduate program in the mathematical sciences. The summer session of the program will be held during June 3 - 28, 2002 at Bryn Mawr College in Bryn Mawr, Pennsylvania, co-directed by Sylvia T. Bozeman, Ph.D. (Spelman College) & Rhonda J. Hughes, Ph.D. (Bryn Mawr). A stipend of \$1,800 plus room and board will be awarded to participants. Participants to the program will be announced by April 15. Deadline for Applications: March 1, 2002

Applications should consist of the following: completed application form, statement describing the expected value of this program to the applicant's academic goals, two letters of recommendation from mathematical sciences faculty familiar with the applicant's work, transcript and current resume, list of graduate programs to which the applicant has applied, together with ranked list of her two or three top choices. Applications forms may be obtained from the website and should be sent to: EDGE Program, c/o Rhonda Hughes, Department of Mathematics, Bryn Mawr College, Bryn Mawr, PA 19010. Visit our website: http://www.brynmawr.edu/Acads/Math/.

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AUBURN UNIVERSITY - DEPARTMENT OF DISCRETE AND STATISTICAL SCIENCES - Applications are invited for a tenure-track position to start in August 2002. Ph.D in Statistics or Biostatistics required. Applicants should have solid theoretical training and evidence of teaching and research ability in statistics. Applicants with experience in applications or consulting in life sciences preferred. Auburn University is an Equal Opportunity/Affirmative Action Employer. Women and Minorities are encouraged to apply. Interested individuals should send a vita, a letter of application and arrange for three letters of recommendations to be sent to Statistics Search Committee, Department of Discrete and Statistical Sciences, 235 Allison Lab, Auburn University, AL 36849-5307, USA. Review of applications will begin January 10, 2002. AA/EOE. Website address: http://www.dms.auburn.edu

BABSON COLLEGE - DEPARTMENT OF MATHEMATICS AND SCIENCE - Applications are invited for tenure-track Assistant Professor position in operations research, decision analysis, or applied statistics beginning September 2002. Candidates must have Ph.D./DBA in operations research, statistics or related field. Strong teaching record and demonstrated research potential preferred. Review of candidates begins October 1, 2001, but applications will be considered until position is filled. Send C.V. and 3 letters of recommendations on teaching and research to: Norean Radke Sharpe, Division of Math/Science, Babson College, Babson Park, MA 02482. Babson College is an Equal Opportunity/Affirmative Action employer.

BALL STATE UNIVERSITY - DEPARTMENT OF MATHEMATICAL SCIENCES - Faculty Position in Mathematics or Statistics - Applications are invited for a tenure-track faculty position in mathematics with the possibility of a second position pending budgetary approval. Appointment will typically be at the rank of assistant professor, but appointment at higher rank can be considered for the qualified candidates. The starting date will be August 16, 2002. Duties include: teaching approximately 8 to 9 hours per semester predominantly at the undergraduate level; research in mathematics or statistics; and professional service. Salary and benefits are competitive and commensurate with qualifications. In addition, one or more temporary positions may be available, pending budgetary approval. Minimum qualifications: all requirements for a doctorate in one of the mathematical sciences or statistics completed by August 1, 2002. Preferred qualification: research interests compatible with present faculty. On-going faculty research interests include work in Lie groups, geometric topology, differential equations, applied mathematics, financial mathematics, and statistics. The Department includes faculty in pure and applied mathematics, financial mathematics, statistics, actuarial science and mathematics education. The Department offers a range of academic programs leading to BA, BS, MA & MAE degrees in these areas. More information about the Department, its programs, and its faculty is available at the URL www.cs.bsu.edu/~math/. An applicant's file is complete when all of the following have been received: 1) letter of application; 2) AMS Standard Cover Sheet, available from the AMS or from the Department; 3) curriculum vitae; 4) research summary; 5) three letters of reference, at least one of which substantially addresses the candidate's teaching ability and performance. Send to: John D. Lorch, Chair, Mathematics Search Committee, Department of Mathematical Sciences, Ball State University, Muncie, IN 47306. Email: msearch@math.bsu.edu. Phone: 765-285-8641; Fax: 765-285-1721. Review of applications will begin immediately and will continue until the position is filled. Interested applicants should also notify the Committee Chair if they intend to attend the 2002 Joint Mathematics Meetings in San Diego. Ball State University is an equal opportunity, affirmative action employer and is strongly and actively committed to diversity within its community.

BINGHAMTON UNIVERSITY - DEPARTMENT OF MATHEMATICAL SCIENCES - The Department of Mathematical Sciences at Binghamton University (The State University of New York at Binghamton) invites applications for an assistant/associate professor in mathematics. Qualifications: A substantial research program in progress and a solid record of effective teaching. Desired: Graduate level teaching and research grants. Areas of interest related to activities of our current faculty have priority. Screening begins January 1, 2002. Send CV, evidence of research teaching credentials, and three letters of recommendation to: Erik Pedersen, Chair, Department of Mathematical Sciences, Binghamton University, Binghamton, NY 13902-6000. Applications will also be accepted through www.mathjobs.org. Phone: 607-777-2148. FAX: 607-777-2450. Email: Junior_Rec@math.binghamton.edu. Binghamton University is an equal opportunity/affirmative action employer.

BOISE STATE UNIVERSITY - DEPARTMENT OF MATHEMATICS - Three beginning tenure-track Assistant Professor positions for fall, 2002 available at Boise State; applied mathematics, statistics, applied probability. Screening begins December 1 for applied mathematics; continuing for the others. Required: doctorate, evidence of research and teaching ability. Consult http://math.boisestate.edu/, FACULTY POSITIONS, for further information. Send application letter summarizing research and teaching interests, vita, graduate transcripts, and 3 letters of reference (one addressing teaching): (Appropriate Hiring Committee), Department of Mathematics, Boise State University, Boise, ID 83725. Information (208) 426-1172, tty (208) 426-1436, office@math-cs.boisestate.edu, fax 208-426-1356. Boise State is an Affirmative Action/Equal Opportunity Employer and strongly encourages applications from female and minority candidates.

BOWLING GREEN STATE UNIVERSITY - DEPARTMENT OF MATHEMATICS AND STATISTICS - The Department of Mathematics and Statistics invites applications for tenure-track positions in Mathematics Education (Assistant or Associate Professor) and Analysis (Assistant Professor) starting August 2002. PhD is required. Preference given to candidates who have demonstrated the ability to conduct research, obtain external funding, and can contribute to the undergraduate and graduate teaching mission of the department. Applications must be postmarked by December 31, 2001. For further details, see www.bgsu.edu/departments/math/. BGSU is an AA/EO employer and encourages applications from women, minorities, veterans, and persons with disabilities.

BOWLING GREEN STATE UNIVERSITY - DEPARTMENT OF MATHEMATICS AND STATISTICS - The Department of Mathematics and Statistics invites applications for a tenure-track Associate Professor or tenured Professor position starting August 2002. PhD in Statistics or closely related area required. Preference given to candidates who have demonstrated the ability to conduct research, obtain external funding, and can contribute to the undergraduate and graduate teaching mission of the department. Applications must be postmarked by November 1, 2001. For further details, see www.bgsu.edu/departments/math/. BGSU is an AA/EO employer and encourages applications from women, minorities, veterans, and persons with disabilities.

BROWN UNIVERSITY - DEPARTMENT OF MATHEMATICS - J.D. Tamarkin Assistant Professorship - One or two three-year non-tenured non-renewable appointments, beginning July 1, 2002. Teaching load: one to two courses per semester (3-6 hours per week). Candidates are required to have received a Ph.D. degree or equivalent by the start of this appointment, and they may have up to three years of academic and/or postdoctoral research experience by then. VIGRE Postdoctoral Fellow: One three-year non-tenured non-renewal appointment, beginning July 1, 2002. Teaching load: one course per semester (3 hours per week). The fellowship includes summer support and \$2,500/year research fund. Candidates are required to have received a Ph.D. degree by the start of this appointment, and they may have up to 18 months of academic and/or postdoctoral research experience by then. Candidates must be U.S. citizens, nationals, or permanent residents to qualify for the VIGRE fellowships which are NSF supported positions. Applicants should have strong research potential and a commitment to teaching in field of research should be consistent what the current research interests of the department. For full consideration, a curriculum vitae, and AMS Standard []

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[Cover Sheet, and three letters of recommendation must be received by December 1, 2002. All inquires and materials should be addressed to: Junior Search Committee, Department of Mathematics, Brown University, Providence, RI 02912. To access the AMS Standard Cover Sheet, visit our website: http://www.math.brown.edu/juniorsearch.shtml. Email inquiries can be addressed to juniorsearch@math.brown.edu. Brown University is an Equal Opportunity/Affirmative Action Employer and encourages applicants from women and minorities.

BROWN UNIVERSITY - DEPARTMENT OF MATHEMATICS - One professorship at the Associate Professor or Professor level, with tenure to begin July 1, 2003. Candidates should have a distinguished research record and a strong commitment to excellence in undergraduate and graduate teaching. Preference to be given to applicants with research interests consonant with those of the present members of the Department (for more information, see http://www.math.brown.edu/faculty/html). Qualified individuals are invited to send a vitae and arrange for at least five letters of recommendation to be forwarded to: Senior Search Committee, Department of Mathematics, Box 1917, Brown University, Providence, Rhode Island 02912. Applications must be postmarked by February 18, 2002, in order to receive full consideration. Email inquiries can be addressed to srsearch@math.brown.edu. Brown University is an Equal Opportunity/Affirmative Action employer and encourages applications from women and minorities.

CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA - DEPARTMENT OF MATHEMATICS - Four tenure-track positions - Math Education (Two positions: Asst Prof and Assoc/Asst Prof): Teach major courses in math ed. and service courses in math ed. and math; advise students seeking secondary teaching credential; assist or coordinate in-service activities; help develop master's degree in math teaching; interact with Center for Ed. and Equity in Math, Sci. and Tech. and College of Ed. Preference given to applicants able to supervise student teaching for math credential students. Min qual: Doctorate in math ed. with strong background in graduate level math or Ph.D. in math, appl math, or stat with strong background in math ed. Initial review of applications 1/25/02. Statistics (Assoc/Asst Prof) Teach graduate stat courses and undergraduate and service courses in stat or math; advise graduate students. Preference given to applicants with expertise in more than one of: statistical modeling, multivariate stat, biostatistics, design of experiment, estimation theory, statistical consulting. Min qual: Ph.D. in stat or math or related area. Initial review of applications 2/8/02. Pure Math (Asst Prof) Teach major courses in pure math and service courses in math; advise undergraduate and graduate students. Preference given to applicants with expertise in more than one of: algebra, complex analysis, geometry, history of applications 2/8/02. All positions: Salary dependent on qualifications. Required: evidence of teaching excellence, ability to direct master's theses, potential for conducting scholarly activities, ability to work with diverse student body. Completion of terminal degree by Sept. '02. Review of applications continues until position is filled or closed. Submit application form (with name of position), curriculum vitae, transcripts, and min. of 3 reference letters to Faculty Search Committee, Math Dept., CSPU Pomona, 3801 W. Temple Ave., Pomona, CA 91768-4007; Imborchert@csupomona.edu; 909-869-4008; Fax: 909-869-4904; http://

CALIFORNIA STATE UNIVERSITY, LONG BEACH - DEPARTMENT OF MATHEMATICS - Applications are invited for a tenure-track assistant professorship in numerical analysis, starting August 26, 2002. Applicants must have a Ph.D. in mathematics or applied mathematics with substantial mathematics and applied mathematics coursework, and have the ability to communicate effectively with an ethnically and culturally diverse campus community. Desired qualifications include successful teaching experience at the university level, a record of scholarly activity in numerical analysis/applied mathematics leading to publication, expertise in the numerical solution of partial differential equations, familiarity with computing systems and software appropriate for numerical analysis courses, and ability and willingness to do committee work and other service activities. Duties include teaching graduate and undergraduate courses in numerical analysis and applied mathematics, research in numerical analysis/applied mathematics leading to publication, and committee service. Applicants are encouraged to visit www.csulb.edu/depts/math for more information. Applicants should send a curriculum vitae, three letters of recommendation, summaries of student evaluation scores from a representative sample of courses taught, and a transcript from the Ph.D.-awarding university to: Arthur K. Wayman, Chair, Department of Mathematics, California State University Long Beach, 1250 Bellflower Blvd., Long Beach, CA 90840-1001. Review of applications begins January 11, 2002. CSULB is an Equal Opportunity Employer committed to excellence through diversity, and takes pride in its multicultural environment. EO/AA Employer.

CALIFORNIA STATE UNIVERSITY, LONG BEACH - DEPARTMENT OF MATHEMATICS - Applications are invited for a tenure-track assistant professorship in Statistics, starting August 26, 2002. Applicants must have a Ph.D. in Statistics with strong Computational Statistics background, and have the ability to communicate effectively with an ethnically and culturally diverse campus community. Desired qualifications include successful teaching experience at the university level, a record of scholarly activity in statistics leading to publication, and experience with statistical software. Duties include teaching graduate and undergraduate statistics courses, research in statistics leading to publication, engaging in appropriate consulting activities, and undertaking committee service. Applicants are encouraged to visit www.csulb.edu/depts/math for more information. Applicants should send a curriculum vitae, three letters of recommendation, summaries of student evaluation scores from a representative sample of courses taught, and a transcript from the Ph.D.-awarding university to: Arthur K. Wayman, Chair, Department of Mathematics, California State University, Long Beach, 1250 Bellflower Boulevard, Long Beach, CA 90840-1001. Review of applications begins January 3, 2002. CSULB is an Equal Opportunity Employer committed to excellence through diversity, and takes pride in its multicultural environment. EO/AA Employer.

CALIFORNIA STATE UNIVERSITY, LOS ANGELES, DEPARTMENT OF MATHEMATICS - Applications are invited for a tenure track position in Mathematics Education at the level of Assistant/Associate professor, starting June or September 2002. Ph.D. in Mathematics with a commitment to Mathematics Education or a doctorate in Education with a strong background in Mathematics required. Doctorate degrees must be from an accredited institution of higher education. Successful candidate will teach both mathematics and mathematics education classes. Publications in peer reviewed journals and/or grant activity is required. CSULA is on the quarter system. Review of applications will begin March 01, 2002. Send a letter of applications and vita to Dr. P. K. Subramanian, Chair, Department of Mathematics, California State University at Los Angeles, 5151 State University Drive, Los Angeles, CA 90032. An Equal Opportunity/Affirmative Action/Title IX/ADA Employer. Qualified Women and Minorities are encouraged to apply.

CARNEGIE MELLON UNIVERSITY - DEPARTMENT OF MATHEMATICAL SCIENCES - The Department of Mathematical Sciences expects to appoint a post-doctoral fellow in mathematical finance, beginning in September 2002. Applicants should have a strong record of accomplishment in probability research and a serious interest in the applications of probability to finance. This will be a two-year appointment, with the possibility of a third-year extension. Recipients will teach at most two courses per year. Applicants should send a vita, list of publications, a statement describing current and planned research, and arrange to have at least three letters of recommendation sent. The deadline for applications is January 18, 2002. All communications should be addressed to: Appointments Committee, Center for Computational Finance, Department of Mathematical Sciences, Carnegie Mellon University, Pittsburgh, PA 15213. Carnegie Mellon University is an Affirmative Action/Equal Opportunity Employer.

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CARNEGIE MELLON UNIVERSITY - DEPARTMENT OF MATHEMATICAL SCIENCES - Tenure-Track Position Applied Analysis - The Department of Mathematical Sciences at Carnegie Mellon University invites applications for a tenure-track position to begin September 1, 2002. The position is in applied analysis, in the areas of nonlinear partial differential equations and the calculus of variations. Preference will be given to candidates who have shown outstanding promise and/or excellent accomplishments in research in the above areas, and pursue a vigorous research program including major contributions beyond the doctoral dissertation. Expertise in the areas of nonconvex variational problems, multiscale problems, connections between atomistic and continuum models, will be preferred. Applicants should send a curriculum vitae, list of publications, a statement describing current and planned research, and arrange to have at least three letters of recommendation sent to: Applied Analysis Appointments Committee, Department of Mathematical Sciences, Carnegie Mellon University, Pittsburgh, PA 15213. The deadline for both tenure-track and tenure applications is January 18, 2002. The Department of Mathematical Sciences is committed to increasing the number of women and minority faculty. Carnegie Mellon University is an Affirmative Action/Equal Opportunity Employer and encourages applications from women and minorities.

CARNEGIE MELLON UNIVERSITY - DEPARTMENT OF MATHEMATICAL SCIENCES -Zeev Nehari Visiting Assistant Professorship - The Zeev Nehari Visiting Assistant Professorship was established to honor the memory of Professor Nehari, who had a long and distinguished career in the Department of Mathematical Sciences. This position is available for a period of three years, beginning in September 2002, and carries a teaching load of three courses during the academic year. Applicants are expected to show exceptional research promise, as well as clear evidence of achievement and should have research interests which intersect those of current faculty of the Department. Applicants should send a vita, list of publications, a statement describing current and planned research, and arrange to have at least three letters of recommendation sent to the committee. The deadline for applications is January 18, 2002. All communications should be addressed to: Zeev Nehari Appointments Committee, Department of Mathematical Sciences, Carnegie Mellon University, Pittsburgh, PA 15213. Carnegie Mellon University is an Affirmative Action/Equal Opportunity Employer.

CASE WESTERN RESERVE UNIVERSITY - DEPARTMENT OF MATHEMATICS - Contingent on funding and staffing needs, the Department of Mathematics anticipates one or more junior Visiting Professor positions for the academic year 2002-03, with some possibility of renewal for up to two additional years. The research interests of a candidate should complement those of the department members. The position includes a 2/2 teaching responsibility, and it is important a candidate have a record of successful classroom teaching experience. Required: PhD in mathematics with experience in teaching. A complete application should contain AMS cover sheet, letter of application (including email address and fax number), curriculum vitae. A candidate should arrange to have three confidential letters sent, these letters should address the candidates research and teaching. Mail all materials to: James Alexander, Chair, Department of Mathematics, Case Western Reserve University, Cleveland, OH 44106-7058. No email or fax applications will be accepted. Screening applications will begin February 1; however applications will be accepted until positions are filled. CWRU is an Equal Opportunity/Affirmative Action Employer. Women and minorities are strongly encouraged to apply.

COLLEGE OF CHARLESTON - DEPARTMENT OF MATHEMATICS - At least one tenure-track Assistant Professor position available August 2002. Qualifications: Ph.D. in one of the mathematical sciences, commitment to undergraduate and graduate teaching, and the potential for continuing research. Preference for one position will be given to applicants with the expertise to teach statistics, discrete modeling, or operations research. Teaching: Nine hours per week is the normal load for those engaged in research. Salary is competitive. Send resume and have three letters of recommendation sent to: Deanna Caveny, Chair, Mathematics Department, College of Charleston, Charleston, SC 29424-0001. Additional information is available by visiting http://math.cofc.edu or e-mailing cavenyd@cofc.edu. The process of evaluating applications will begin on January 14, 2002 but applications will be considered until the position(s) are filled. AA/EOE.

COLLEGE OF STATEN ISLAND OF THE CITY UNIVERSITY OF NEW YORK - DEPARTMENT OF MATHEMATICS - Assistant or Associate Professor of Mathematics/Pure Mathematics - The Department of Mathematics of the College of Staten Island of The City University of New York seeks candidates for an anticipated tenure- track position in the Department of Mathematics as an Assistant or Associate Professor, beginning September 2002. Required: PhD in mathematics, a demonstrated commitment to research, publication, and teaching. Candidates working in research areas of analysis, algebra, geometry, or probability theory are especially invited to apply. Responsibilities include teaching, performing department and college service, and engagement in an active and productive research agenda. The successful candidate will present credentials appropriate for appointment to the doctoral faculty of the CUNY Graduate Center. Appointment at the Associate level requires a significant record of publication and external funding. Salary range: Assistant Professor, \$42,162 - 57,049; Associate Professor, \$46,094 - \$68,174, commensurate with qualifications. Review of applications will begin on November 26, 2001 and continue until the position is filled. Send an AMS coversheet, a curriculum vitae, a short description of current and planned research, a short statement on teaching experience and philosophy, and at least three letters of recommendation (to be sent separately) to: Professor Prabudh Misra, Chair of the Pure Mathematics Search Committee, Department of Mathematics, College of Staten Island/CUNY, 2800 Victory Boulevard, Room 1S-215 Staten Island, NY 10314. EEO/AA/ADA employer.

COLUMBIA UNIVERSITY - DEPARTMENT OF MATHEMATICS - VIGRE Assistant Professor Applications are invited for postdoctoral/assistant professor positions partially supported by a National Science Foundation VIGRE (Vertical Integration of Research and Education) grant beginning July 1, 2002. Summer support is included. Applicants must be U.S. citizens or permanent residents and within 18 months of the award of their Ph.D. PhD in Mathematics or Mathematical Physics required. Applicants must demonstrate a commitment to research and teaching. One-year appointment, normally renewable for two more years. Reduced teaching load of one course per term to allow greater involvement with departmental graduate program that emphasizes courses and research that cross traditional scientific boundaries. The AMS Standard Cover Sheet should be completed online at www.mathjobs.org. Applications should also include a vita, (p) reprints, research and teaching statements and three letters of recommendation (at least one addressing teaching qualifications). Applicants are encouraged to submit all their materials electronically at www.mathjobs.org and should also mail them to: VIGRE Hiring Committee, Department of Mathematics, Mail Code 4406, Columbia University, 2990 Broadway, New York, NY 10027. Application files that are complete by January 1 will receive preferred consideration. Columbia University is an equal opportunity/affirmative action employer and is especially interested in receiving applications from qualified women and minorities.

COLUMBIA UNIVERSITY - DEPARTMENT OF MATHEMATICS - Ritt Assistant Professor - Applications are invited for Ritt Assistant Professorships at Columbia - for new PhD's regardless of age. One-year appointment, normally renewable for three more years. Teaching load is two courses per semester with possible graduate course in specialty. The AMS Standard Cover Sheet should be completed online at www.mathjobs.org. Applications should also include a vita, (p)reprints, research and teaching statements and three letters of recommendation (at least one addressing teaching qualifications). Applicants are encouraged to submit all their materials electronically at www.mathjobs.org and should also mail them to: Ritt Hiring Committee, Department of Mathematics, Mail Code 4406, Columbia University, 2990 Broadway, New York, NY 10027. Application files that are complete by January 1 will receive preferred consideration. Columbia University is an equal opportunity/affirmative action employer and is especially interested in receiving applications from qualified women and minorities.

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CORNELL UNIVERSITY - SCHOOL OF OPERATIONS RESEARCH AND INDUSTRIAL ENGINEERING - Tenure-Track Faculty Positions: Cornell University's School of Operations Research and Industrial Engineering is seeking candidates for several tenure-track faculty positions. Most appointments are expected to be at the rank of assistant professor; however, exceptional scholars at any rank are encouraged to apply. In particular, we seek to appoint a distinguished scholar to a chaired position. The search is focused on the following areas of specialization: data mining, systems engineering, logistics and applied operations research, information technology. Candidates should have a Ph.D. in Operations Research, Industrial Engineering, Statistics, Computer Science, Mathematics or a related discipline and demonstrable excellence in teaching and research. Applicants should provide a C.V., a one-page statement of research directions and teaching interests, a doctoral transcript for junior applicants, and other supporting materials. They should also arrange for four recommendation letters to be mailed. All relevant materials should be sent to the Faculty Search Committee, School of ORIE, Rhodes Hall, Cornell University, Ithaca, NY 14853. Applicants should apply as early as possible. Applications received before January 15, 2002 will receive full consideration. Women and minority candidates are especially encouraged to apply. Cornell University is an affirmative action/equal opportunity employer.

CORNELL UNIVERSITY - SCHOOL OF OPERATIONS RESEARCH AND INDUSTRIAL ENGINEERING - Tenure-track or tenured position in Data Mining - Rank open. PhD required in statistics, OR, CS, or related field. Duties include providing leadership in the development of programs in data mining. Excellence in research and teaching is required. Experience beyond the PhD and willingness to work with students and sponsors on business applications desirable. ORIE at Cornell is a diverse group of statisticians, probabilists, math programmers, and those working in simulation and manufacturing systems. An ideal candidate will have broad training and interests. Membership in Cornell's Department of Statistical Sciences or Faculty of Computing and Information would be possible, depending on candidate's interests and desires. CV, 1-page statement of research and teaching interests, doctoral transcript for junior applicants, and four letters should be sent to Statistics/DM Search, ORIE, Rhodes Hall, Cornell University, Ithaca, NY 14853. Applications completed by January 10, 2002 given preference. More information at http://www.orie.cornell.edu

DARTMOUTH COLLEGE - DEPARTMENT OF MATHEMATICS - Dartmouth College is the recent recipient of and NSF/NIMH award to establish an fMRI Data Center (see http: www.fmridc.org). This is a joint effort of Dartmouth's Department of Mathematics, Center for Cognitive Neuroscience and Department of Computer Science. In conjunction with the center the Department of Mathematics is now accepting applications for a two year Postdoctoral Fellow in Applied Mathematics, initial appointment in the 2002-2003 academic year. Fellows will be expected to teach one graduate seminar each year (in their specialty), and to help in the implementation and development of novel post-processing tools for the Center. Fellows will interact with all of the cooperating departments. The ideal applicant will have strong interdisciplinary interests and have a background in informatics, image or signal processing, or medical imaging, but applicants with strong mathematical backgrounds who are looking to become more applied and learn about data mining, medical imaging or image processing may also be excellent candidates. Send a letter of application, résumé, graduate transcript, thesis abstract (and description of other research activities and interests if appropriate), and 3 or preferably 4 letters of recommendation (at least one should discuss teaching) to: Betty Harrington, Dartmouth College, Department of Mathematics, 6188 Bradley Hall, Hanover, NH 03755-3551. Dartmouth College is committed to affirmative action and strongly encourages applications from minorities and women.

DARTMOUTH COLLEGE - DEPARTMENT OF MATHEMATICS - John Wesley Young Research Instructorship - 2-years, new or recent Ph.D.'s whose research overlaps department member's. Teach 4 ten-week courses spread over 2 or 3 quarters. \$43,000 for nine months; \$9,555 summer research stipend. Send application letter, resume, research/thesis description, graduate transcript, and 3 or preferably 4 letters of recommendation (at least one should discuss teaching) to: Betty Harrington, Department of Mathematics, Dartmouth College, 6188 Bradley Hall, Hanover, NH 03755-3551. Files completed by January 5, 2002 considered first. Dartmouth is committed to affirmative action and strongly encourages minorities and women to apply.

DARTMOUTH COLLEGE: Tenure-track Assistant Professor openings anticipated with initial appointment in 2002-2003 academic year in logic/set theory, or number theory, or "applicable mathematics." Someone in applicable mathematics should straddle the line of pure and applied mathematics, working in core mathematics with a record of interests in potential applications. (For example, number theorists with interests in cryptography or coding theory, representation theorists who work in signal processing, combinatorialists with interests in computing, probabilists with interests in statistics, as well as more classical applied mathematicians.) Projects are currently funded by NSF and DoD. Collaborations with the medical and engineering schools, and programs in computer science and cognitive neuroscience exist. Collaborations and or appointments in Dartmouth's M.D./Ph.D. program as well as Dartmouth's Institute for Secure Technologies Studies are also possible. In exceptional cases an appointment at a higher level may be possible. Teaching consists of four 10-week courses over 2 or 3 terms. Send letter of application, vita, research interests, four letters of recommendation, at least one on teaching, and, if your native language is not English, on your ability to use English in a classroom, to: Betty Harrington, Department of Mathematics, Dartmouth College, 6188 Bradley Hall, Hanover, NH 03755-3551. Applications complete by January 5 considered first. Women and minorities are encouraged to apply.

DAVIDSON COLLEGE - DEPARTMENT OF MATHEMATICS - Applications are invited for a regular appointment in the Mathematics Department, with an initial two-year appointment at the Assistant Professor level to begin August 1, 2002. Completion or imminent completion of the Ph.D. is required. Candidates must be committed to outstanding teaching and continuing scholarly activity. The teaching load is 5 semester courses per year. Some computer science background is desirable. A completed application consists of a statement of professional aspirations and goals, resume, (photocopies of) graduate and undergraduate transcripts, and 3 letters of reference, of which at least one must specifically address the applicant's teaching. These materials should be sent to the attention of Prof. Stephen Davis, Chair, Department of Mathematics, Box 6931, Davidson College, Davidson, NC 28036-6931. (Email: stdavis@davidson.edu; see also the "Faculty Position" link at http://www.davidson.edu/math/.) Applications received by November 30, 2001, will receive fullest consideration. Davidson is a highly selective, nationally ranked four-year liberal arts college with a Presbyterian heritage. Davidson College is an Equal Opportunity Employer; women and minorities are encouraged to apply.

EASTERN MICHIGAN UNIVERSITY - DEPARTMENT OF MATHEMATICS - Applications are invited for a tenure track assistant professor position beginning fall semester 2002. A Ph.D. in mathematics and demonstrated excellence in teaching are required. The applicant must have excellent communication skills and a strong commitment to excellence in teaching. In addition, it is expected that the applicant has a good research record with potential for continuing scholarly activity and will actively participate in departmental and professional service. Preference will be given to those with an interest in teaching college geometry. The standard teaching load is 12 credit hours per semester: typically one advanced course and three courses of calculus or below. Applications will be reviewed beginning January 7 and will be accepted until the position is filled or the search is terminated. A letter of application, a resume, and at least three letters of reference that address the above criteria should be sent to Posting #F0210, Eastern Michigan University, 202 Boone Hall, Ypsilanti, MI 48197. EMU is an affirmative action/equal opportunity employer.

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EMORY UNIVERSITY - DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE - The Department of Mathematics and Computer Science, Emory University, invites applications for an anticipated tenure track Assistant Professorship or a tenured appointment at the rank of Associate Professor or Professor, effective 2002-2003. Applicants must have a research program in computational mathematics and hold a PhD in Mathematics, Computer Science, or a closely related field. The department offers several undergraduate programs, a PhD in Mathematics and an MS in Computer Science, and applicants should have strong records, or promise, as undergraduate and graduate teachers. Emory University has embarked on an ambitious building program for the sciences and mathematics, and we expect substantial growth in departmental and interdepartmental education and research programs. Key to our development is expansion of a computational math and science research group. Primary research interests must be numerical analysis, applied mathematics or high performance computing, with preference for individuals whose application areas enhance Emory's strength in life and physical sciences. Applicants must provide CV's, with at least three recommenders' names, and have recommendation letters sent to: Professor Dwight Duffus, Screening Committee, Department of Mathematics and Computer Science, Emory University, Atlanta GA 30322. Screening of applications will begin on 1 January 2002. Informal inquiries are welcome; please see our web page at www.mathcs.emory.edu/News/Ops for further details. Emory University is an Affirmative Action/Equal Opportunity Employer.

FRANKLIN AND MARSHALL COLLEGE - DEPARTMENT OF MATHEMATICS - Assistant Professor of Mathematics - two full-time tenure-track positions beginning fall 2002. Ph.D. in Mathematics and/or Statistics. One position is open to all areas of specialization in mathematics; the other is open to applicants who can teach both mathematics and statistics. We seek applicants eager to teach and mentor undergraduates in a liberal arts setting. Both excellence in teaching and continued scholarly activity are expected for the attainment of tenure. A normal teaching load is five courses per year. Send letter of application, AMS cover sheet, Curriculum Vita, list of courses taught, (including the applicant's responsibilities), four letters of recommendation, (at least two that address teaching ability), and copies of undergraduate and graduate transcripts, to: Alan Levine, Department of Mathematics, Franklin & Marshall College, Lancaster PA 17604-3003. See http://www.FandM.edu/Departments/Mathematics/Mathematics.html/. Deadline is January 18, 2002. An affirmative action employer, Franklin and Marshall is committed to cultural pluralism through the hiring of minorities and women.

GEORGIA COLLEGE AND STATE UNIVERSITY - DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE - The Department of Mathematics and Computer Science of Georgia College & State University invites applications for tenure track positions in the faculty of mathematics. Salary and rank will be commensurate with qualifications. Excellence in teaching, scholarly activity, and university/community service are requirements for promotion. In addition, completion of a terminal degree is required for tenure. A doctorate in mathematics or a related field is preferred. Candidates who have completed all doctoral requirements except the dissertation will also be considered. Candidates from all specializations of mathematics are welcome to apply. More details may be found at www.gcsu.edu/facultyjobs. Please send a letter of application which includes statements on teaching and scholarship at a liberal arts university, current vita, copies of graduate transcripts, and three letters of recommendation to: Mathematics Search Chair, Department of Mathematics and Computer Science, CBX 017, Georgia College & State University, Milledgeville, GA 31061. Successful candidates for the position will be required to submit official graduate and undergraduate transcripts. Please indicate availability for interviews at the January 2002 meeting of AMS/MAA. Review of applications will begin on December 15, 2001 and continue until the positions are filled. GC&SU is an Equal Opportunity/Affirmative Action Employer

GEORGETOWN UNIVERSITY - DEPARTMENT OF MATHEMATICS - The Department, committed to excellence in both research and undergraduate teaching, has two tenure-track positions at the Assistant Professor level beginning August 26, 2002. The Ph.D. degree in mathematics is required with strong research credentials in analysis or applied mathematics and interests commensurate with those of the department. An application should include: a completed AMS standard cover sheet, a curriculum vitae, reprints or preprints of no more than three research papers, evidence of effective undergraduate teaching, and at least three letters of recommendation. Send to: Professor George Benke, Chairman of the Hiring Committee, Department of Mathematics, Georgetown University, Washington, DC 20057-1233. Consideration of complete applications will begin December 1, 2001, and will continue until available positions are filled. Georgetown University is an Equal Employment Opportunity and Affirmative Action institution in employment and admissions.

HAMLINE UNIVERSITY - DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE - Applications are invited for a tenure track position in Mathematics/Computation Science beginning September 2002. We are seeking to expand a small Computer Science program to include courses in applied computation. Candidates with interdisciplinary interests (e.g. scientific, sociological, or managerial applications of computing) are especially encouraged. A Ph.D. in Mathematics or Computer Science is required. Hamline is an urban university with proximity to the University of Minnesota and many other colleges in the immediate urban area. We emphasize excellence in teaching in a liberal arts setting, beginning with a first-year seminar and including collaborative research with undergraduates. Hamline is an equal opportunity employer; women and members of other underrepresented groups are encouraged to apply. Applications will be accepted until the position is filled. Initial screening interviews will be conducted at the Joint Mathematics Meetings in January. Send curriculum vita and cover letter with 3 contact references to: Prof. Nadine Myers, Department of Mathematics mail #25, Hamline University, 1536 Hewitt Avenue, St. Paul MN 55104. For further information, access www.hamline.edu/depts/math/index.html.

HARVEY MUDD COLLEGE - DEPARTMENT OF MATHEMATICS - Assistant Professor of Mathematics - Harvey Mudd College invites applications for a tenure-track assistant professorship. Excellence in teaching is absolutely essential, as is evidence of a strong and ongoing research program. Areas of special interest in pure or applied mathematics include include analysis, topology, algebraic geometry, dynamical systems, partial differential equations, statistics and mathematical modeling, but all research specialties will be considered. Candidates must be willing to supervise undergraduate research, and work with others in the development of departmental programs. Harvey Mudd College is a highly selective undergraduate institution of science, engineering and mathematics; the average SAT score of entering students is over 1480. More than one-third of the student body are National Merit Finalists, and one year of high school calculus is a requirement for admission. Each year there are over 20 graduates in mathematics, with approximately half going to graduate school. Over 40% of mathematics alumni from HMC have obtained a PhD degree. The college enrolls about 680 students and is a member of the Claremont College consortium, which consists of four other undergraduate colleges and two graduate institutions, forming an academic community of about 5000 students. There is an active and vital research community of over 40 mathematicians in Claremont. Claremont is situated approximately 35 miles east of downtown Los Angeles, in the foothills of the San Gabriel mountains. The community is known for its tree-lined streets and village charm. It is an easy drive from Claremont to the cultural attractions and universities of the greater Los Angeles area, as well as the ocean, mountains and deserts of southern California. Applicants should send a curriculum vitae, a description of their teaching philosophy and experience, a description of their current research program, and arrange to have three letters of recommendation sent to the address that appears below. Further information about the college, department and position may be found at http://www.math.hmc.edu. Preference will be given to applications completed by January 4, 2002. Harvey Mudd College is an equal opportunity employer and is committed to the recruitment of applicants historically underrepresented on college faculties. Address for applications: Professor Arthur T. Benjamin, Chairman, Search Committee, Department of Mathematics, Harvey Mudd College, Claremont, CA 91711-5990.

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INDIANA UNIVERSITY BLOOMINGTON, DEPARTMENT OF MATHEMATICS - Four three-year visiting positions will be available to start in the 2002-2003 academic year. These terminal postdoctoral positions are named after our late, distinguished colleague Max Zorn, and are restricted to relatively new Ph. D.'s. Three of these positions are funded by a VIGRE grant from the National Science Foundation and they are restricted to U.S. citizens or permanent residents. The fourth is not restricted. Outstanding candidates in all areas of pure and applied mathematics and statistics are encouraged to apply. Excellent research potential as well as a commitment to teaching are required. Indiana University is an equal opportunity / affirmative action employer. Applications received by January 1, 2002 will be given full consideration. Please send a letter of application to: Post-Doctoral Search Committee, Department of Mathematics, Indiana University, Rawles Hall, 831 East 3rd Street, Bloomington, IN 47405-7106.

INDIANA UNIVERSITY BLOOMINGTON, DEPARTMENT OF MATHEMATICS - Two tenure track positions in statistics will be available starting in the 2002-2003 academic year. Outstanding candidates with a Ph.D. in all areas of pure and applied statistics are encouraged to apply. One of these positions could be a senior position with tenure. Excellent research potential, as well as a commitment to teaching are required. Indiana University is an equal opportunity / affirmative action employer. Preference will be given to applications received by December 9, 2001. Please send a letter of application to: Search Committee, Department of Mathematics, Indiana University, 831 East 3rd Street, Rawles Hall, Bloomington, IN 47405-7106.

IOWA STATE UNIVERSITY - DEPARTMENT OF MATHEMATICS - The department seeks applicants, pending funding, for two tenure track positions to begin in August 2002 at the assistant professor level. One position is targeted at the area of numerical analysis and computational mathematics, and the other at the area of probability and stochastic processes. An excellent record in research and teaching is required. Experience beyond the Ph.D. is highly desirable. We are interested in hiring mathematicians whose research programs are complementary to the existing strengths in the department, and who can interact with current faculty in the department as well as faculty in other units of the university. For further information about these positions and the department visit our website at www.math.iastate.edu. Applicants must submit a vita and a brief statement describing their research accomplishments and plans. They must also arrange for four letters of recommendation, one of which must address the applicant's teaching ability and experience. All application materials should be sent to: Justin R. Peters, Interim Chair, Department of Mathematics, Iowa State University, Ames, 50011-2064. Applicants whose completed applications are received by January 15, 2002 are assured of receiving full consideration. Iowa State University is an Equal Opportunity/Affirmative Action Employer and strongly encourages women and members of under-represented groups to apply.

JOHNS HOPKINS UNIVERSITY - DEPARTMENT OF MATHEMATICS - The J. J. Sylvester Assistant Professorship in Mathematics - The Department of Mathematics invites applications for a nontenure track three year Assistant Professorship to be awarded again this year on July 1, 2002. Preference will be given to candidates who have received their Ph.D. within the last two years and who have demonstrated high potential in teaching and research in the general areas of Algebra, Analysis, Geometry, Number Theory and Topology. The position carries a teaching load of two courses one semester and one the other semester with a competitive salary and a discretionary research fund. Applications should be sent to: J.J. Sylvester Assistant Professorship, Department of Mathematics, Johns Hopkins University, 404 Krieger Hall, Baltimore, MD 21218-2689 and should include a complete curriculum vitae, at least four letters of recommendation (including a letter concerning teaching) and a description of current and planned research. Applications received by December 1, 2001 will be given priority. The Johns Hopkins University is an Affirmative Action/Equal Opportunity Employer. Minority and women candidates are encouraged to apply.

KANSAS STATE UNIVERSITY - DEPARTMENT OF MATHEMATICS - Subject to budgetary approval, applications are invited for a tenure-track position commencing August 4, 2002. Preference will be given to specialists in Analysis. Applicants must have strong research credentials and a commitment to excellence in teaching. A Ph.D. in mathematics or a Ph.D. dissertation accepted with only formalities to be completed is required. Letter of application, current vita, description of research, three letters of reference evaluating research, and one reference letter evaluating teaching should be sent to: Louis Pigno, Department of Mathematics, Cardwell Hall 138, Kansas State University, Manhattan, KS 66506. Position may be available December 3, 2001, but applications for position will be reviewed until February 1, 2002, or until position is closed. AA/EOE.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY - DEPARTMENT OF MATHEMATICS - The Department may make appointments, at the level of lecturer and assistant professor or higher, in pure mathematics for the year 2002-2003. The teaching load will be nine hours for the academic year (eight hours for assistant professor appointments). These positions are open to mathematicians with doctorates who show definite promise in research. Applications should be complete by January 15. Applicants should arrange to have sent (a) vita; (b) three letters of reference; (c) a description of their most recent research; & (d) a research plan for the immediate future to: Pure Mathematics Committee, Massachusetts Institute of Technology, Room 2-263, 77 Massachusetts Ave., Cambridge, MA 02139-4307. MIT is an Equal Opportunity, Affirmative Action Employer. (For more information about the position or institution: http://www-math.mit.edu.)

MASSACHUSETTS INSTITUTE OF TECHNOLOGY - DEPARTMENT OF MATHEMATICS - C.L.E. Moore Instructorships In Mathematics - These positions are open to mathematicians with doctorates who show definite promise in research. The teaching load will be nine hours for the academic year. Applications should be complete by January 15. Applicants should arrange to have sent (a) a vita; (b) three letters of reference; (c) a description of the research in their thesis; and (d) a research plan for the next year to: Pure Mathematics Committee, Massachusetts Institute of Technology, Room 2-263, Cambridge, MA 02139-4307. MIT. is an Equal Opportunity, Affirmative Action Employer. (For more information about the position or institution: http://www-math.mit.edu.)

MASSACHUSETTS INSTITUTE OF TECHNOLOGY, DEPARTMENT OF MATHEMATICS - Applied Mathematics - Applications are invited for a limited number of positions in applied mathematics, including numerical analysis and scientific computation, starting fall 2002. Available positions include instructorships, lectureships, assistant professorships, and possibly higher levels. Appointments will be made mainly on the basis of demonstrated research accomplishments and potential. Complete applications must be received by January 3. To apply, please send a vita with a description of your recent research and research plans, and arrange to have three letters of reference sent. Address: Committee on Applied Mathematics, Room 2-345, Department of Mathematics, MIT, 77 Massachusetts Ave., Cambridge, MA 02139-4307. MIT is an Equal Opportunity, Affirmative Action Employer. (For more information about the position or institution: http://www-math.mit.edu.)

ADVERTISING DEADLINE for the January/February 2002 issue is: DECEMBER 1, 2001

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MICHIGAN STATE UNIVERSITY -DEPARTMENT OF MATHEMATICS - Tenure Track Positions in Applied Mathematics- Description: The Department has tenure track positions to begin Fall 2002 for a candidate with a history of outstanding research in Applied Mathematics, especially Mathematical Biology, Scientific Computation, Applied and Numerical PDE, and Materials Science. Rank and salary will be determined by the qualifications of the successful candidates. A successful candidate should have a history of substantial collaboration with biological science, the medical sciences, or engineering An excellent teaching record is required. A joint appointment with another unit might be arranged for the applicant for whom such a situation might be suitable and desirable. Application information: An applicant should send a vita as well as a brief statement of research interests, and arrange for at least four letters of recommendation to be sent, one of which must specifically address the applicant's ability to teach. Application via email is strongly encouraged. To receive an electronic application and information, send an email to: jobs@math.msu.edu with the message "send application-info". Application materials can also be addressed to The Hiring Committee, Department of Mathematics, Michigan State University, East Lansing, MI 48824-1027. Completed applications (including letters of recommendation) received by November 16, 2001 are assured of consideration. Women and minorities are strongly encouraged to apply. MSU is an Affirmative Action/Equal Opportunity Institution. Persons with disabilities have the right to request and receive reasonable accommodation.

MILLERSVILLE UNIVERSITY - DEPARTMENT OF MATHEMATICS - Full-time, tenure-track assistant professorship to begin August 2002, in a department of 20 faculty and approximately 165 majors in mathematics and mathematics education. Required: Ph.D. (or completion within one year) in mathematics with expertise in geometry or topology; evidence of strong commitment to excellence in teaching and continued scholarly activity; must be prepared to teach a broad spectrum of undergraduate mathematics courses and to teach undergraduate geometry as it relates to the preparation of secondary school teachers; must provide evidence of teaching effectiveness; and must complete a successful interview and teaching demonstration. Duties include an annual 24-hour teaching load, scholarly activity, student advisement, curriculum development and committee work. Millersville University is a selective, comprehensive, state university of 7500 students located in historic Lancaster County, PA, within two hours of Philadelphia, Baltimore, and Washington, D.C., and three hours of New York City. Additional information on the university and the department can be found at www.millersville.edu. Send application letter that addresses the position requirements, vita, copies of undergraduate and graduate transcripts and three letters of reference (at least two of which attest to recent teaching effectiveness) to Dr. Ximena Catepillán Hearn, Staff Search Committee/ WM1101A, Department of Mathematics, Millersville University of Pennsylvania, P.O. Box 1002, Millersville, PA 17551-0302. Full consideration will be given to applications received by 2/1/2002. An EO/AA Institution. E-mail applications will not be accepted.

MILLERSVILLE UNIVERSITY - DEPARTMENT OF MATHEMATICS - Full-time, tenure-track assistant professorship in mathematics education, to begin August 2002, in a department of 20 faculty members and approximately 165 undergraduate majors, offering B.A. and B.S. degrees in mathematics and B.S.Ed. and M.Ed. degrees in mathematics education. Required: Doctorate (or completion within one year) in mathematics education or in mathematics with a specialization in mathematics education; broad training in mathematics, with at least 24 semester hours of graduate level courses in pure or applied mathematics; evidence of strong commitment to excellence in teaching and continued scholarly activity; familiarity with current directions in mathematics education, including the use of technology; must be prepared to teach a broad spectrum of undergraduate mathematics courses and work effectively with professional and community groups; must provide evidence of teaching effectiveness; and must complete a successful interview and teaching demonstration. Duties include an annual 24-hour teaching load, including mathematics courses for pre-service elementary and secondary teachers and a variety of undergraduate mathematics service courses, scholarly activity, student advisement, curriculum development in mathematics education at both undergraduate and graduate levels, and committee work. Experience teaching mathematics in K-12 setting is preferred. Millersville University is a selective, comprehensive state university of 7500 students located in historic Lancaster County, PA, within two hours of Philadelphia, Baltimore, and Washington, D.C., and three hours of New York City. Additional information on the university and the department can be found at www.millersville.edu. Send application letter that addresses the position requirements, vita, copies of undergraduate and graduate transcripts and three letters of reference (at least two of which attest to recent teaching effectiveness) to Dr. Bernie Schroeder, Staff Search Committee/WM1101B, D

NORTH CAROLINA STATE UNIVERSITY - DEPARTMENT OF MATHEMATICS - Professor and Head - The Department of Mathematics, in the College of Physical and Mathematical Sciences at North Carolina State University (NCSU), invites applications and nominations for the position of Professor and Head of the Department. The Department has 66 full time faculty, over 100 graduate students, over 200 undergraduate majors, and a number of visiting faculty and postdoctoral research assistants. With annual research expenditures in excess of \$2 million, the Department has strong research programs in both pure and applied mathematics and an exceptional record of interdisciplinary collaborations with other departments, government, industry, and other academic institutions such as Duke, the University of North Carolina, and other universities in the greater Triangle area. State-of-the-art computing and communication facilities support strong undergraduate, graduate, and outreach programs, all of which the faculty takes very seriously. Members of the Department provide leadership for the Center for Research in Scientific Computation, an interdisciplinary Center that provides a focal point for research in applied mathematics and computational science and facilitates collaborations with outside departments and institutions. The Department and the Center jointly sponsor an Industrial Applied Mathematics Program that involves graduate students, postdoctoral research associates, faculty, and industrial scientists. The new Head will have an exceptional opportunity to take a leadership role in new directions for the Department. He or she will be expected to establish high standards for the teaching and research programs of the Department, to have a balanced appreciation for teaching, pure and applied research, and outreach, and to maintain a vigorous program of scholarship and professional activity. The salary and initial package for the successful applicant will be competitive and commensurate with qualifications. NCSU offers unique opportunities for industrial-academic collaborations on the new Centennial Campus, an over 1000-acre site housing both University and industrial research facilities. The nearby Research Triangle Park is home to numerous industrial research campuses, the National Institute of Environmental Health Sciences, a major Environmental Protection Agency complex, the Microelectronics Center of North Carolina, and the NCSU Biotechnology Center. The Triangle area is regularly acclaimed in national publications as a great place to live. Applicants must have a Ph.D. in mathematics, substantial teaching experience with a demonstrable record of excellence, realized nationally or internationally recognized achievements in research as evidenced by an excellent record of publication, demonstrated potential for effective administration, and must qualify for the rank of Professor with tenure at NCSU. Applicants should send a letter of interest, a curriculum vita, and by arrangement at least three letters of reference to: Dr. D. E. Aspnes, Chair, Mathematics Head Search Committee, College of Physical and Mathematical Sciences, Box 8201, North Carolina State University, Raleigh, NC 27695-8201. The Department and its many activities are described more fully on its Web site http://www.math.ncsu.edu. Questions may be directed to aspnes@unity.ncsu.edu. Review of applications will begin 01 Nov 2001 and will continue until the position is filled. NCSU is an equal opportunity, affirmative action employer and especially solicits applications from women, underrepresented minorities and persons with disabilities.

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THE OHIO STATE UNIVERSITY - DEPARTMENT OF MATHEMATICS - The Department of Mathematics of The Ohio State University expects to have available several tenure-track/tenured positions and several visiting positions, effective Autumn Quarter 2002. Candidates in all areas of pure and applied mathematics are invited to apply. Significant mathematical research accomplishment and evidence of excellent teaching ability are required. The Department will also have available several Hans J. Zassenhaus Assistant Professorships and Arnold Ross Assistant Professorships. These term positions are renewable annually up to a total of three years. Candidates are expected to present evidence of excellence in research and teaching. Please send a CV and have at least three letters of recommendation sent to: Professor Peter March, Chair, Department of Mathematics, The Ohio State University, 231 W. 18th Avenue, Columbus, Ohio 43210. The Ohio State University is an Equal Opportunity/Affirmative Action employer. Women and minority candidates are encouraged to apply.

MICHIGAN STATE UNIVERSITY - DEPARTMENT OF STATISTICS AND PROBABILITY - The Department of Statistics and Probability at Michigan State University has a tenure track Assistant Professorship available beginning August 16, 2002. The candidate should have a Ph.D. with concentration in statistics and/or probability and a strong research and teaching potential. Preference will be given to candidates with interests in statistics and interdisciplinary research. Please have curriculum vitae and three recommendation letters sent to: Search Committee, Department of Statistics and Probability, A415 Wells Hall, Michigan State University, East Lansing, MI 48824-1027. The selection process will begin December 1, 2001 and continue until the position is filled. MSU is an Affirmative Action/Equal Opportunity Institution. Minorities and women are strongly encouraged to apply. http://stt.msu.edu

PURDUE UNIVERSITY - DEPARTMENT OF MATHEMATICS - Applications are invited for tenure-track Assistant Professor or three-year Research Assistant Professor appointments beginning August 2002. Ph.D. by August 2002, exceptional research promise, and strong teaching record required. Applications will also be accepted for possible appointments at the Associate Professor/Professor level. Ph.D. and excellence in research and teaching required. Outstanding applicants from all mathematical research areas will be considered. Because the department has several openings in applied mathematics, candidates who have significant research accomplishments in applied mathematics or computational applied mathematics are especially encouraged to apply. Several positions may be available for terms ranging from one semester to two years beginning August 2002. All applicants should have research interests in common with Purdue faculty. Send vita, summary of research interests/plans, and arrange for three letters of recommendation (one addressing teaching) to be sent to: Carl Cowen, Head, Department of Mathematics, Purdue University, West Lafayette, IN 47907-1395. Review of applications will begin November 15, 2001 and continue until available positions are filled. Offers for tenure-track positions may be made at any time; some offers for RAP and visiting positions will be made before the end of January 2002. Purdue is an Affirmative Action/Equal Opportunity Employer.

PURDUE UNIVERSITY - DEPARTMENT OF MATHEMATICS - The Purdue University Department of Mathematics is seeking applications for a full-time ten-month faculty position in Mathematics Education (open rank; joint appointment with the Department of Curriculum & Instruction). Must have a Ph.D. in mathematics, mathematics education or a related area, with a strong mathematics background and at least a master's degree (or equivalent) in mathematics. Three years of teaching experience at the secondary school level and a commitment to outreach activities in schools preferred. Review of applications will begin November 21, 2001 and will continue until position is filled. Send letter of application, CV, reprints of publications, statement of research/scholarly interests, and three letters of recommendation, including at least one that addresses teaching abilities, to: Chair, Math Ed Search Committee, Department of Curriculum and Instruction, 1442 LAEB, Purdue University, West Lafayette, IN 47907-1442. Purdue University is an affirmative action/equal opportunity employer. Women and minorities are encouraged to apply.

PURDUE UNIVERSITY - DEPARTMENT OF STATISTICS - Faculty Position(s) in Statistics - The Department of Statistics at Purdue University has one or more openings for faculty positions. Screening will begin December 1, 2001, and continue until the position(s) is (are) filled. Essential Duties: Conduct advanced research in statistical sciences, teach undergraduate and graduate students and maintain service in the Statistics Department. Essential Qualifications: Require Ph.D. in Statistics or related field, in hand or expected by August 12, 2002. Candidates must demonstrate potential excellence in research and teaching. Salary and benefits are competitive and commensurate with qualifications. Rank and salary are open. Candidate for assistant professor should send a letter of application, curriculum vita and three letters of reference. For senior positions, send a letter of application or nominations, curriculum vita, and the names of three references. Purdue University is an AA/EO employer and educator. Send applications to: Mary Ellen Bock, Head, Department of Statistics, Purdue University, 1399 Mathematical Sciences Building, West Lafayette, IN 47907-1399, USA.

POMONA COLLEGE - DEPARTMENT OF MATHEMATICS - Pomona College seeks applicants for a tenure track position in statistics to begin July 2002. While the appointment is targeted at the assistant professor level, applications from candidates at a more senior level will be seriously considered. The strongest candidate will have a broad background in statistics, be an outstanding teacher, and be interested in teaching a wide range of courses, some of which include the applications of statistics in a variety of fields. Candidates should have a strong research agenda, be excited about directing student research, and be able to teach an ethnically diverse student body. Pomona College is a liberal arts college, near Los Angeles, with 1400 students (http://www.pomona.edu). It is a member of the Claremont Colleges, a consortium of seven institutions with over forty active mathematicians and statisticians who work together. Send applications to Search Committee, Mathematics Department, Pomona College, 610 North College Avenue, Claremont, CA 91711-6348. Materials may also be sent by electronic mail to mathsrch@pomona.edu; plain text is preferred. A complete application will include a curriculum vitae, graduate transcripts, three letters of recommendation (at least one of which evaluates teaching), a description, for the non-specialist, of research accomplishments and plans, and a statement of teaching philosophy. Applications which are complete by December 15, 2001, will receive full consideration. Pomona College is an equal opportunity employer and especially invites applications from women and members of under-represented groups.

ROWAN UNIVERSITY - DEPARTMENT OF MATHEMATICS - Assistant Professor - Specialty in Mathematics Education - Tenure-Track. Starting date -9/1/02. Qualifications: An earned doctorate in Mathematics Education or Mathematics, with a strong background in K-12 mathematics education. Responsibilities: Teaching of mathematics content courses for prospective teachers including the development of a research agenda. Substantial work with inservice teachers is expected. Submit: Letter of application, curriculum vitae, transcripts, and three letters of reference by December 15, 2001 to: Dr. Eric Milou, Mathematics Dept., Rowan University, Glassboro, NJ 08028. http://www.rowan.edu/mars/depts/math/

Newsletter advertisement submissions send to awm@math.umd.edu

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SIMON FRASER UNIVERSITY - DEPARTMENT OF MATHEMATICS - Faculty Appointment in Mathematics - The Department of Mathematics of Simon Fraser University has two positions in mathematics to be filled over the next two years. One position will start September 1, 2002, the second a year later. Applicants will be expected to have completed a Ph.D. degree at the time of appointment and to have demonstrated a strong teaching and research potential. The appointments will be made at the level of Assistant Professor. The department seeks to enhance its current strengths in combinatorics, computer algebra, modern analysis and number theory. The first hiring priority is combinatorial optimization. The second priority is a candidate with expertise in algebra or algebraic geometry. Candidates who can support the department's strengths will be preferred. Exceptional applicants in all areas of pure mathematics will be considered. Applications, including a curriculum vitae and descriptive statements on research plans and teaching activities, should be sent by 10 January, 2002 to: Search Committee, Department of Mathematics, Simon Fraser University, Burnaby, BC V5A 1S6, Canada. email: mcs@sfu.ca Please arrange for letters of reference to be sent, in confidence, from three referees. We thank all applicants in advance; only those short-listed will be contacted. Further information on the department and the university can be found on the http://www.math.sfu.ca/mast_home.html. These positions are subject to final budgetary approval. Simon Fraser University is committed to the principle of equity in employment and offers equal employment opportunities to all qualified applicants. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.

SOUTHERN ILLINOIS UNIVERSITY, CARBONDALE - DEPARTMENT OF MATHEMATICS - Applications are invited for two tenure-track positions at the assistant professor level to begin on August 16, 2002. Applicants from all areas of pure and applied algebra (including abstract algebra, number theory, combinatorics, cording theory and cryptography) and all areas of pure and applied analysis (including geometric, harmonic, and stochastic analysis, differential equations, dynamical systems, and mathematical physics) will be considered. Applicants must demonstrate evidence of, or potential for, excellence both in research and in teaching at all university levels. Ph.D. in mathematics required by August 15, 2002. Send letter of application, CV, and three letters of recommendation to: Algebra/Analysis Positions, Department of Mathematics, Southern Illinois University Carbondale, Illinois 62901-4408. Review of applications will begin December 7, 2001, and continue until positions are filled. Southern Illinois University Carbondale is an equal opportunity/ affirmative action employer. Women and minorities are encouraged to apply.

SOUTHERN ILLINOIS UNIVERSITY, CARBONDALE - DEPARTMENT OF MATHEMATICS -Applicants are invited for a tenure-track position at the assistant or associate professor level designated to support a Teaching Excellence in Mathematics and Science initiative. Appointment to begin on August 16, 2002. Ph.D. in Mathematics required: The person in this position will be expected to maintain an active research program in an area of pure or applied mathematics. Teaching and service duties of the position will support training programs for teachers at the elementary and secondary levels. Applicants must demonstrate evidence of, or potential for, excellence in research in a field of pure or applied mathematics and excellence in teaching at all university levels, and an interest in an aptitude for teaching prospective teachers. For appointment at the associate professor rank, the candidate must have an established record of both research and teaching excellence. To apply, please send letter of application and CV, and have at least three letters of recommendation sent, to: TEMS Position, Department of Mathematics, Southern Illinois University Carbondale, Carbondale Illinois 62901-4408. Review of applications will begin December 7, 2001, and continue until position is filled. Southern Illinois University Carbondale is an equal opportunity/ Affirmative action employer. Women and minorities are particularly encouraged to apply.

SOUTHERN ILLINOIS UNIVERSITY, CARBONDALE - DEPARTMENT OF MATHEMATICS -Applicants are invited for a tenure-track position at the assistant or associate professor level designated to support a Teaching Excellence in Mathematics and Science initiative. Appointment to begin on August 16, 2002. Ph.D. in Mathematics required. The person in this position will be expected to maintain an active research program in an area of pure or applied mathematics. Teaching and service duties of the position will support training programs for teachers at the elementary and secondary levels. Applicants must demonstrate evidence of, or potential for, excellence in research in a field of pure or applied mathematics and excellence in teaching at all university levels, and an interest in an aptitude for teaching prospective teachers. For appointment at the associate professor rank, the candidate must have an established record of both research and teaching excellence. To apply, please send letter of application and CV, and have at least three letters of recommendation sent, to: TEMS Position, Department of Mathematics, Southern Illinois University Carbondale, Carbondale Illinois 62901-4408. Review of applications will begin December 7, 2001, and continue until position is filled. Southern Illinois University Carbondale is an equal opportunity/ Affirmative action employer. Women and minorities are particularly encouraged to apply.

STANFORD UNIVERSITY - DEPARTMENT OF MATHEMATICS - The department expects to make several Szego assistant professor appointments and one or two tenure track assistant professor appointments beginning in September 2002, among the following fields: (1) analysis, (2) geometry or topology, (3) algebra, number theory or logic, (4) applied mathematics or probability. Applicants for a Szego assistant professor position should not be more than 2 years from the PhD. Candidates should send a letter of application and a curriculum vitae, including a list of publications, and a cover sheet clearly stating the following: name, area of specialization, institution, (expected) date of PhD, and PhD advisor. Also the candidate should arrange to have three letters of recommendation and some evidence of commitment to excellence in teaching sent to: Professor Richard Schoen, Department of Mathematics, Stanford University, Stanford CA 94305 by January 1, 2002. Stanford is an Equal Opportunity, Affirmative Action Employer, and welcomes applications from women and minorities.

STANFORD UNIVERSITY - DEPARTMENT OF MATHEMATICS - 2 year Postdoctoral research position - Research in area of computational topology. Candidates should have some knowledge of topology, and preferably some knowledge of statistics and computing. Candidates should send letter of application, and curriculum vitae, including list of publications. Please include and clearly state the following: area of specialization, institution, (expected) date of PhD, and PhD advisor. Send to: G. Carlsson, Department of Mathematics, Stanford University, Stanford, CA 94305-2125, by January 31, 2002. Also, candidates should arrange for three letters of recommendation to be sent to above address. (em: gunnar@math.stanford.edu) Stanford is an Equal Opportunity, Affirmative Action Employer, and welcomes applications from women and minorities.

ST. JOSEPH'S UNIVERSITY - DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE - The Department of Mathematics and Computer Science at St. Joseph's University invites applications for a tenure-track faculty position beginning August 2002. A Ph.D. in mathematics or secondary mathematics education is required. The successful applicant will teach undergraduate mathematics courses and mathematics education courses at the master's level. For more information see: http://wwwmacs.sju.edu.

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SYRACUSE UNIVERSITY - DEPARTMENT OF MATHEMATICS - The department seeks to fill two positions, without restriction on rank, beginning August, 2002. All candidates should have a Ph.D. in mathematics or closely related field and outstanding records of accomplishment and potential in both research and teaching. Exceptional candidates from all areas will be considered, but preference will be given to candidates in algebra or algebraic geometry. Preference will also be given to candidates whose research interests overlap and/or complement those of existing faculty. See http://math.syr.edu for more information. Applications should include a cover letter, CV, three letters of recommendation about the applicant's research, and at least one letter of recommendation about the applicant's teaching. Address applications to Chair, Department of Mathematics, Syracuse University, Syracuse, NY 13244. Screening of senior level candidates is ongoing. Screening of junior level candidates will begin January 1, 2002. All searches will continue until the positions are filled. Syracuse University is an Equal Opportunity/Affirmative Action Employer committed to fostering a diverse faculty; women and minority candidates are especially encouraged to apply.

TEXAS A&M UNIVERSITY - DEPARTMENT OF MATHEMATICS - Applications are invited for tenured and tenure-eligible faculty positions beginning fall 2002. The field is open, but we particularly seek applications from individuals whose mathematical interests would augment and build upon existing strengths both within the Mathematics Department as well as other departments in the University. Salary, teaching loads and start-up funds are competitive. For a Tenured Position the applicant should have an outstanding research reputation and would be expected to fill a leadership role in the department. An established research program, including success in attracting external funding and supervision of graduate students, and a demonstrated ability and interest in teaching are required. Informal inquiries are welcome. For an Assistant Professorship, we seek strong research potential and evidence of excellence in teaching. Research productivity beyond the doctoral dissertation will normally be expected. We also have several visiting positions available. Our Visiting Assistant Professor positions are for a three year period and carry a three course per year teaching load. They are intended for those who have recently received their Ph.D. and preference will be given to mathematicians whose research interests are close to those of our regular faculty members. In addition, as part of our VIGRE grant, we expect to have up to four positions carrying a one-course-per-semester teaching load. Senior Visiting Positions may be for a semester or one year period. For full consideration, the complete dossier should be received by January 15, 2002. Applicants should send the completed "AMS Application Cover Sheet", a vita, and arrange to have letters of recommendation sent to: Faculty Hiring, Department of Mathematics, Texas A&M University, College Station, Texas 77843-3368. Further information can be obtained from: http://www.math.tamu.edu/hiring. Texas A&M University is an EOE/AA employer and the Dept. encourages applications from women & m

TEXAS TECH UNIVERSITY - DEPARTMENT OF MATHEMATICS AND STATISTICS - Applications are invited for four Tenure-Track Assistant Professor positions beginning Fall 2002. Higher level appointments are possible in exceptional cases. All areas of pure and applied mathematics, statistics, and mathematics education will be considered with priority being given to candidates having research interests compatible with those of the department. Strong promise or accomplishment in research and teaching and a Ph.D. degree at the time of appointment are required. Applications can be either submitted on-line at https://www.mathjobs.org/ or mailed to: Alex Wang, Hiring Chair, Department of Mathematics and Statistics, Texas Tech University, Lubbock, TX 79409-1042. Please submit a resume, a completed AMS standard cover sheet, and arrange to have three letters of reference sent directly. Texas Tech University is committed to diversity among its faculty. Women and minorities are strongly encouraged to apply. Review of applications will begin immediately. Additional information is available at http://ttmath.ttu.edu/~awang/employ/employ/employ.html Texas Tech is an AA/EO employer.

UNIVERSITY OF ALABAMA - DEPARTMENT OF MATHEMATICS - The Department of Mathematics invites applications for one tenure-track position in the area of Math Education beginning Fall 2002 for the purpose of building a Math Education component in the coming years. Candidates must possess a doctorate in mathematics or a doctorate in mathematics education with a Master's degree in mathematics (or the equivalent) by August 31, 2002. A proven record and experience in teaching and research is expected. Send a curriculum vita along with a letter of application, a completed AMS Standard Cover Sheet, and arrange for three letters of recommendation to be sent to Dr. Martyn Dixon, Chair of the Search Committee, Department of Mathematics, University of Alabama, Box 870350, Tuscaloosa, AL 35487. Applications will be reviewed beginning October 15, 2001, and continuing until the position is filled. The University of Alabama is an Affirmative Action/Equal Opportunity Employer. For more information about the position or the institution, visit our website http://www.math.ua.edu./

UNIVERSITY OF ALASKA ANCHORAGE - DEPARTMENT OF MATHEMATICAL SCIENCES - Mathematics/Applied Statistics - Tenure-track Assistant Professor position available August 2002. Ph. D. in Mathematics or Mathematical Statistics required. Potential for effective teaching and scholarly/creative activity are primary considerations. For the complete vacancy announcement, please see www.finsys.uaa.alaska.edu/uaahrs or contact afhmd@uaa.alaska.edu UAA is an AA/EO Employer and Educational Institution.

THE UNIVERSITY OF ARIZONA - DEPARTMENT OF MATHEMATICS - The Department of Mathematics is seeking applications for tenure-track positions at either the Assistant or Associate Professor level, which will begin in Fall 2002. Preference will be given to candidates whose research expertise lies in the fields of Applied Mathematics, Analysis or Mathematics Education. By the time of appointment, candidates are expected to have a Ph.D. and excellent research record or potential, as well as a strong commitment to teaching. Rank and salary depend on the qualifications of the selected candidate(s). The Department will [also have a postdoctoral position, The Hanno Rund Visiting Assistant Research Professorship, available for Fall 2002. This is an annual appointment of up to three years carrying a teaching load of three hours per semester. Candidates are required to have a Ph.D. degree or equivalent by the start of appointment, and they may have up to three years of academic and/or postdoctoral research experience by then. The Department may also have other postdoctoral or visiting positions for the 2002-2003 academic year (Ph.D. required). Further information about the full range of the Department's research and educational activities may be found at http://www.math.arizona.edu. We encourage early application. Application review begins November 1, 2001, and continues as long as positions remain unfilled. To ensure consideration, please submit application materials by January 2, 2002. Please send a letter of interest (please specify position(s) applied for), an AMS Cover Sheet (which can be downloaded from http://www.ams.org/coversheet), a curriculum vitae with a list of publications, a statement of research interests, and a minimum of three (3) letters of recommendation (enclose or arrange to be sent) to: Personnel Committee, Department of Mathematics, University of Arizona, P.O. Box 210089, Tucson, Arizona 85721-0089. The University of Arizona is an EEO/AA Employer-M/W/D/V

UNIVERSITY OF CALIFORNIA, DAVIS - DEPARTMENT OF MATHEMATICS - The Department of Mathematics at the University of California, Davis, is soliciting applications for up to three tenure-track/tenured positions and several Visiting Research Assistant Professor (VRAP) positions starting July 1, 2002. These positions and appointments are contingent upon budgetary and administrative approval. Appointment of the tenure-track/tenured position will be made commensurate with qualifications. It will normally be made at the level of Assistant Professor, but exceptional candidates will be considered for Associate Professorship with tenure. The focus research areas of the Department are: Analysis and Partial Differential Equations, Applied Mathematics, Discrete Mathematics, Geometry and Topology, Mathematical Physics, Numerical Analysis, and Scientific Computation. The Department has current needs in 1) Applied Mathematics and Scientific Computation, and 2) Geometry and Topology; however outstanding candidates in all of the focus research areas will be considered. Minimum []

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UNIVERSITY OF CALIFORNIA, LOS ANGELES - DEPARTMENT OF MATHEMATICS - Subject to availability of resources and administrative approval, the following positions are available: (1) Several tenure-track and senior positions in all areas of mathematics. (2) Several E.R. Hedrick Assistant Professorships. Salary is \$52,900. Three year appointment. Teaching load: four quarter courses per year, which may include one advanced course in the candidate's field. (3) Several Research Assistant Professorships in Computational and Applied Mathematics (CAM). Salary is \$52,900. Three year appointment. Teaching load: normally is reduced to two or three quarter courses per year by research funding as available; may include one advanced course in the candidate's field. (4) Several Adjunct Assistant Professorships or Lectureships in the Program in Computing (PIC). Applicants for the Adjunct position must show very strong promise in teaching and research in an area related to computing. Teaching load: four one-quarter programming courses each year and one seminar every two years. One-year initial appointment, with the option of applying for renewal for a second year and possible longer, up to a maximum service of four years. Salary is \$56,600. Applicants for the Lectureship must show very strong promise in the teaching of programming. An M.S. in Computer Science or equivalent degree is preferred. Teaching load: six one-quarter programming courses per year. One-year appointment, probably renewable one or more times, depending on the needs of the program. Salary is \$43,152 or more, depending on experience. (5) Several VIGRE Assistant Professorships. Hedrick, CAM, or PIC applicants, who are U.S. citizens or permanent residents, may also apply for a VIGRE Assistant Professor position. Three-year appointment. Salary is \$52,900. The successful recipient will receive a summer stipend of \$6,500 for two summers and \$2,500 per year for travel, equipment, and supplies for three years. Teaching load: 3 courses per year. (6) Several Adjunct Assistant Professorships and Research Postdocs. Up to one year appointment, with the possibility of renewal. Strong research and teaching background required. Salary \$48,700-\$52,900. Teaching load for Adjuncts: five quarter courses per year. (7) Several visiting instructorships. For more details, see http://www.math.ucla.edu/~search. To apply, complete the application on the website, or send e-mail to search@math.ucla.edu or write to: Staff Search, Department of Mathematics, University of California, Los Angeles, CA 90095-1555. Preference will be given to applications completed by January 7, 2002. UCLA is an Equal Opportunity/Affirmative Action Employer. Under Federal law, the University of California may employ only individuals who are legally authorized to work in the United States as established by providing documents specified in the Immigration Reform and Control Act of 1986.

UNIVERSITY OF CALIFORNIA, SANTA BARBARA - DEPARTMENT OF MATHEMATICS - Faculty Positions - The University of California, Santa Barbara invites applications for the following positions in the Department of Mathematics, with the appointments to be effective September 2002. ASSISTANT PROFESSOR POSITION: Candidates for this tenure track position must possess a Ph.D. by September 2002. The department's priority is analysis, including operator algebras and noncommutative geometry, harmonic analysis and complex analysis, but all fields will be considerd. Demonstrated research excellence and potential to become an effective teacher are required. Candidates who best enhance the long-term research plans of the department will be given preference. VISITING POSITIONS: One or more special one-year visiting assistant professorships may be available, with possibility of renewal for additional years, up to three years in total. These positions carry a teaching load of four one-quarter courses per year. Excellence in research, potential for interaction with faculty at UC Santa Barbara and evidence of good teaching are required. Candidates must possess a Ph.D. by September 2002. Applicants for these positions should send application materials to the APPROPRIATE COMMITTEE: the Assistant Professor Committee OR the Visiting Assistant Professor Committee, at the Department of Mathematics, University of California, Santa Barbara, CA 93106-3080. These materials should include a vita, a publication list, a statement of research interests and teaching philosophy and the American Mathematical Society Cover Sheet (available online at http://www.ams.org). Include an email address and fax number if available. Applicants should also arrange to have at least four letters of recommendation (at least one of which is directed towards teaching) sent to the appropriate committee. Applicants for the tenure track position will automatically be considered for the visiting positions unless noted otherwise, so duplicate applications are unnecessary. App

UNIVERSITY OF CALIFORNIA AT SANTA BARBARA - DEPARTMENT OF STATISTICS AND APPLIED PROBABILITY - invites applications for open-level and junior positions, starting July 1 2002. Specializations in Statistics, Applied Probability or Mathematical Finance considered. Require Ph.D. in relevant field and demonstrated excellence in research and teaching. Current resume, papers and three reference letters to: Search Committee, Department of Statistics and Applied Probability, University of California, Santa Barbara, CA 93106-3110, USA. Apply by November 16, 2001 for primary consideration, however positions open until filled. An EE/AAO employer. Women and minorities are encouraged to apply.

UNIVERSITY OF DAYTON - DEPARTMENT OF MATHEMATICS - Applications are invited for an anticipated tenure track position in mathematics education at the assistant professor level starting in August 2002. Candidates must have a Ph.D. degree in mathematics education or mathematics. Applicants must have a strong commitment to research in mathematics education and the potential to become an effective teacher. Responsibilities include teaching, advising, and curriculum development in support of K-12 pre-service and in-service mathematics teachers. Further responsibilities include establishment and maintenance, in cooperation with the School of Education, outreach programs with partnership school districts in the Dayton metropolitan area. The selection process begins December 14, 2001. To receive full consideration, all materials must be received by January 16, 2002. The application package should consist of a resume, three letters of recommendation, a statement of research plans and a statement of teaching philosophy. Both teaching and research abilities should be addressed in the letters. Please include an e-mail address in your correspondence. Send application materials to: Dr. Harold Mushenheim, Chair of the Search Committee, Department of Mathematics, University of Dayton, Dayton, OH 45469-2316. Feel free to contact the search committee at Harry Mushenheim@notes.udayton.edu. Further information can be obtained at http://www.udayton.edu/~mathdept. The University of Dayton is a private comprehensive Catholic university founded by the Society of Mary in 1850. It has more than 6000 undergraduates and 3000 graduate students. The Department of Mathematics offers B.A. and B.S. degrees in mathematics and M.S. degree in applied mathematics. The University of Dayton is firmly committed to the principle of diversity.

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UNIVERSITY OF FLORIDA - DEPARTMENT OF MATHEMATICS - The University of Florida is pleased to announce the creation of The John G. Thompson Research Assistant Professorship in Mathematics. First appointment in Fall 2002. Three year terminal position with salary of \$50,000 for acad. yr. 2002-03, and \$5,000 summer research supplement for each of three years. Reduced teaching load of one course per semester for each acad. yr. Eligibility: Mathematics Ph.Ds who have received degrees in 2000 or later. Outstanding candidates in all areas of mathematics are encouraged to apply. Candidates must send vita and papers to: Chair of Search Committee, Department of Mathematics, P.O. Box 118105, University of Florida, Gainesville, FL 32611-8105, by December 15, 2001, and arrange for three letters of recommendation to be sent directly to the above address. The department welcomes applications from women and minority candidates. The University of Florida is an EEO/AA institution. For more information about the position or institution: http://www.math.ufl.edu

UNIVERSITY OF FLORIDA - DEPARTMENT OF MATHEMATICS - Applications are invited for a tenure track position at the assistant professor level in (i) Probability, or (ii) Biomathematics. Appointment begins in Fall 2002. Salary will be competitive. Applicants must show strong research promise and excel in teaching as well. Applicants must forward curriculum vita and list of publications to: Chair of Search Committee, Department of Mathematics, 358 Little Hall, University of Florida, Gainesville, FL 32611-8105. Completed applications are due by January 2, 2002. Applicants must arrange for three letters of recommendations to be sent directly to the above address. The department welcomes applications from women and minority candidates. The University of Florida is an EEO/AA institution. For more information about the position or institution: http://www.math.ufl.edu

UNIVERSITY OF GEORGIA - DEPARTMENT OF MATHEMATICS - The Department of Mathematics invites applications for a tenure-track position in applied mathematics at the Assistant Professor rank; the particular areas of interest include applied PDE, financial mathematics, and biotechnology, (for more details see our web site, http://www.math.uga.edu). The position will begin fall semester, 2002. To assure full consideration, applications must be received by Jan 4, 2002. Applicants should have a Ph. D. in pure or applied mathematics and exhibit an outstanding research potential in mathematics with a commitment to excellence in teaching. They should arrange to have three letters of reference concerning research and one letter concerning teaching sent directly to the address below. The application should include a completed AMS Standard Cover Sheet, a curriculum vita, a statement about their current and future research plans, and a statement about teaching experiences and philosophy. Submit the application the Chair, Search Committee, Department of Mathematics, University of Georgia, Athens, GA 30602. Emails can be directed to search@math.uga.edu The University of Georgia is an Affirmative Action/Equal Opportunity Employer that is committed to increasing the diversity of its faculty. We especially encourage applications from women, minorities and underrepresented groups.

UNIVERSITY OF HAWAII - DEPARTMENT OF MATHEMATICS - The Department of Mathematics invites applications for an assistant professor, position number 84092, tenure-track position to begin August 1, 2002. Candidates should have significant promise or achievements in research in some field of pure or applied mathematics. Evidence of effective teaching is essential as duties include undergraduate and graduate teaching. To apply, send your curriculum vitae, and arrange for four letters of recommendation to be sent to: The Hiring Committee, Department of Mathematics, University of Hawaii, Honolulu, HI 96822-2273. At least one of the letters of recommendation should concern the candidate's experience and abilities as a teacher. All application materials including letters of reference must be postmarked by December 15, 2001. Information concerning the department and the position can be found at http://www.math.hawaii.edu. The University of Hawaii encourages applications from members of racial or ethnic minorities and from women, EEO/AA employer.

UNIVERSITY OF KANSAS - DEPARTMENT OF MATHEMATICS - Applications are invited for one or more tenure-track positions at the assistant professor level beginning August 18, 2002, January 1, 2003, or as negotiated. (This position(s) is contingent on final budgetary approval.) Preference will be given to candidates in analysis, algebra/algebraic geometry, and stochastic analysis/control. Candidates must have a Ph.D. in math or a related field or its requirements completed by August 18, 2002. Postdoctoral experience is preferred. Letter of application, detailed resume with description of research, completed AMS application form, and at least three recommendation letters should be mailed to: Jack Porter, Chair, Department of Mathematics, 1460 Jayhawk Boulevard, University of Kansas, Lawrence, KS 66045-7567 (or faxed to (785) 864-5255). For more details see www.math.ukans.edu/jobs or contact kumath@math.ukans.edu. Deadlines: Review of applications will begin on November 10, 2001 and will continue until the position(s) are filled. EO/AA Employer.

UNIVERSITY OF KANSAS - DEPARTMENT OF MATHEMATICS - Applications are invited for a temporary position at the assistant professor level beginning August 18, 2002, January 1, 2003, or as negotiated. (This position is contingent on final budgetary approval.) This position is normally renewable for a second and third year. Preference will be given to candidates in complex dynamics, dynamical systems, or probabilistic analysis. Candidates must have a Ph.D. in math or related field or its requirements completed by August 18, 2002. Letter of application, detailed resume with description of research, completed AMS application form, and at least three recommendation letters should be mailed to Jack Porter, Chair, Department of Mathematics, 1460 Jayhawk Boulevard, University of Kansas, Lawrence, KS 66045-7567 (or faxed to (785) 864-5255). For more details see www.math.ukans.edu/jobs or contact kumath@math.ukans.edu. Deadlines: Review of applications will begin on November 10, 2001 and will continue until the position is filled. EO/AA Employer.

UNIVERSITY OF KENTUCKY - DEPARTMENT OF MATHEMATICS - The Department of Mathematics at the University of Kentucky invites applications for at least two regular positions, either tenure-track assistant professorships, or, for exceptionally qualified applicants, tenured positions, to begin in Fall 2002, subject to final budgetary approval. We are interested in applicants in the areas of algebra/number theory, discrete mathematics/combinatorics, numerical analysis/scientific computing, and topology. Applicants in other areas are also welcome. We encourage applications from women and other underrepresented groups. Applicants should mail the AMS application cover sheet along with a curriculum vita, a description of present and future research activities, and evidence of effective teaching, and should arrange to have at least four letters of recommendation, including one addressing the applicant's teaching skills, mailed to: Recruiting Committee, Department of Mathematics, 715 POT, University of Kentucky, Lexington, KY 40506-0027. We will begin the evaluation of applications on November 1, 2001, and we will continue to accept applications until all positions are filled. UK is an Equal Opportunity Affirmative Action Employer.

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Just mail in changes using the form on the BACK COVER or drop us an email: awm@math.umd.edu.

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UNIVERSITY OF LOUISVILLE - DEPARTMENT OF MATHEMATICS - Assistant Professor and Associate Professor - The Department of Mathematics at the University of Louisville invites applications for two tenure track positions, one at the assistant professor level and the other at the associate professor level, to begin July 1, 2002. Ph.D. required. Preference will be given to candidates whose research interests lie in applied analysis, applied algebra, differential equations, discrete mathematics, probability and statistics. Applicants who can strengthen the Department's new internship program are also preferred. Candidates must show strong potential in research and teaching and have effective communications skills. Applications should include: 1) American Mathematical Society's standard cover sheet, 2) curriculum vitae, 3) summary of research interests, 4) statement of teaching qualifications and, 5) at least four letters of recommendation, including letters which discuss in some detail, the candidate's teaching and research qualifications. Be sure to state whether the application is for the assistant or associate professor position. Applications should be sent to: Search Committee, University of Louisville, KY 40292. Review of applications will begin January 14, 2002, and continue until the positions are filled. E-mail questions to math@louisville.edu. The University of Louisville is an Affirmative Action/Equal Opportunity Employer and encourages women and underrepresented minorities to apply. Applicants must comply with the provisions of the Immigration Reform and Control Act.

UNIVERSITY OF MAINE - DEPARTMENT OF MATHEMATICS AND STATISTICS - Assistant Professor of Mathematics Education - The Department of Mathematics and Statistics (in the College of Liberal Arts and Sciences) and the College of Education and Human Development at the University of Maine seek candidates for a tenure-track, joint appointment at the rank of Assistant Professor for Fall 2002. This is a full-time position for teaching courses in mathematics and mathematics education. The successful candidate will also be expected to pursue scholarly work in mathematics education, participate in the procurement of education-related external funding, participate in program development in mathematics education, and participate in the activities of the University System's Maine Mathematics and Science Teacher Excellence Collaborative grant project. The requirements for the position are: Ph.D. or Ed.D. in mathematics education by August 31, 2002, demonstrated potential for excellence in scholarship, and demonstrated excellence in teaching. Review of applications will begin December 1, 2001. Applicants should send a letter of intent, summarizing their background in teaching and scholarship; a curriculum vita; and at least three letters of reference to: Chair, Mathematics Education Search Committee, Department of Mathematics and Statistics, Room 333, 5752 Neville Hall, University of Maine, Orono, Maine 04469-5752. The University of Maine is an Equal Opportunity/Affirmative Action Employer

UNIVERSITY OF MARYLAND BALTIMORE COUNTY - DEPARTMENT OF MATHEMATICS AND STATISTICS - The department invites applications for a tenure-track faculty position in applied mathematics at the rank of assistant professor, starting in the fall of 2002. The successful candidate should have a Ph.D. in mathematics or a related field, have an active, independent research program, strong potential for obtaining external funding, and a commitment to excellence in teaching. Preference will be given to candidates who are able to conduct interdisciplinary research, as well as those able to interact with existing groups in the department. Current research areas represented in the department include numerical analysis, differential equations, optimization, systems theory, and mathematical modeling. The department offers BS, MS and Ph.D. degrees in applied mathematics and in statistics. Applicants should send a vita, a summary of their current research program, and have three letters of reference sent to: Mathematics Recruitment Committee, Department of Mathematics and Statistics, University of Maryland Baltimore County, Baltimore, MD 21250. Screening of applicants will commence November 1, 2001, and will continue until the position is filled. UMBC is an Affirmative Action, Equal Opportunity Employer.

UNIVERSITY OF MARYLAND, COLLEGE PARK - CENTER FOR BIOINFORMATICS AND COMPUTATIONAL BIOLOGY - Director - Nine Faculty - The University of Maryland invites faculty applications at all levels for the newly established Center for Bioinformatics and Computational Biology. The campus has committed substantial resources to the Center, including funds for the recruitment of nine new faculty including a Director. It is anticipated that the primary specialization areas of the new faculty will collectively span the fields of computer science, mathematics and statistics, molecular biology, molecular evolution/phylogeny, and biochemistry. The primary responsibility of the new faculty will be to lead a nationally visible research program in selected areas of computational genomics, proteomics and molecular evolution, complementing existing strengths at the University of Maryland. Candidates for the Director position are expected to be senior researchers with prominent recognition in these areas. All the new faculty will be housed in contiguous space set aside for the Center, and will have access to significant high-end computing infrastructure through the University of Maryland Institute for Advanced Computer Studies. Each will also be affiliated with at least one other campus academic unit appropriate to her/his interests. There is ample potential for collaboration with other outstanding bioinformatics research groups nearby, in organizations such as NIH, Celera, TIGR, the Maryland Biotechnology Institute, and the Smithsonian Institution. To apply, send a letter of application, curriculum vitae, and URL for additional information to cecilia@umiacs.umd.edu, and have at least 3 letters of recommendation sent to: Cecilia Kullman, Center for Bioinformatics and Computational Biology, Institute for Advanced Computer Studies, 2131 A.V. Williams Bldg, University of Maryland, College Park, MD 20742. The University of Maryland is an affirmative action, equal opportunity employer. Women and minorities are encouraged to apply. Applicat

UNIVERSITY OF MICHIGAN - DEPARTMENT OF MATHEMATICS - The Department has several openings at the tenure-track or tenure level. Candidates should hold the Ph.D. in mathematics or a related field, and should show outstanding promise and/or accomplishments in both research and teaching. areas of special interest are: analysis, geometry/topology, applied and interdisciplinary mathematics, including mathematical biology, computational science, probability, and actuarial or financial mathematics. However, we encourage applications from any area of pure or applied mathematics. Salaries are competitive, based on credentials. Applicants should send a CV, bibliography, descriptions of research and teaching experience, and have three or four letters of recommendation, at least one of which addresses the candidate's teaching experience and capabilities, sent to: Personnel Committee, University of Michigan, Department of Mathematics, 2074 East Hall, Ann Arbor MI 48109-1109. Applications are considered on a continuing basis but candidates are urged to apply by November 1, 2001. More detailed information regarding available positions may be found on our webpage: http://www.math.lsa.umich.edu. Inquiries may be made by e-mail to math.chair@math.lsa.umich.edu. The University of Michigan is an equal opportunity, affirmative action employer.

UNIVERSITY OF MICHIGAN - DEPARTMENT OF MATHEMATICS - Assistant Professorships, VIGRE Assistant Professorships, and T.H. Hildebrandt Research Assistant Professorships - These positions for up to three years are designed to provide mathematicians with favorable circumstances for academic career development in research and teaching. Assistant Professorships have a teaching responsibility of two courses per semester; the VIGRE and T.H. Hildebrandt positions have a responsibility of one course per semester. These positions may be combined with other postdoctoral fellowships giving additional reductions in teaching responsibility. Preference is given to candidates who receive the Ph.D. degree in 2000 or later and who submit a completed application by December 19, 2001. Salary is competitive and there are opportunities for supplemental summer salary. Application forms and further important information are available at http://www.math.lsa.umich.edu/information/positions.shtml, by Email at math.chair@math.lsa.umich.edu, or by mail from: Hiring Committee, Department of Mathematics, University of Michigan, 2074 East Hall, 525 E. University, Ann Arbor, MI 48109-1109. The University of Michigan is an equal opportunity, affirmative action employer.

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UNIVERSITY OF MISSOURI, COLUMBIA - DEPARTMENT OF MATHEMATICS - Applications are invited for several tenure-track and postdoctoral positions to start in fall 2002. The tenure-track positions will be in the two areas of Mathematical Finance and Number Theory/Encryption. All positions require a Ph.D. in Mathematics or equivalent by August 31, 2002 and a proven record and experience to warrant the hiring at a given rank. Salary is commensurate with rank and qualifications. Send a curriculum vitae along with a letter of application, a completed AMS Standard Cover Sheet, and arrange for three letters of recommendation to be sent to: Elias Saab, Chair, Department of Mathematics, 202 Math Sciences Building, University of Missouri, Columbia, MO 65211. Applications will by reviewed starting November 1, 2001 and continue until suitable candidates are found. The University of Missouri-Columbia is an Equal To request ADA accommodations, please contact our ADA Coordinator at (573) 874-7278 or opportunity/Affirmative Action employer. adaww@showme,missouri.edu. For more information visit our homepage: http://www.math.missouri.edu.

UNIVERSITY OF NORTH CAROLINA, CHAPEL HILL - DEPARTMENT OF MATHEMATICS - Applications are invited for positions as a postdoctoral fellow in the Department of Mathematics. Applicants in pure mathematics and in applied mathematics will be considered. The appointments are for two years and are normally renewable for a third year. Candidates should have received a doctorate by August I, 2002, either in mathematics, applied mathematics, or a closely related field. Applicants with strong research promise in an area common with our current faculty will be given highest priority. More information can be found at our website at www.math.unc.edu. Applicants should send the i) Standard AMS Cover Sheet, ii) a vita, iii) a description of current research and a plan for future research, iv) four letters of recommendation, v) the name(s) of one or more faculty at UNC who work in their general area of research. The AMS Standard Cover Sheet should be completed online at www.mathjobs.org/jobs/. Applicants are encouraged to submit their entire application at this site. They can also mail their applications to one of these addresses: PURE APPLICANTS: Pure Search Committee, Department of Mathematics, UNC-CH, CB #3250 Phillips Hall, Chapel Hill, NC 27599-3250. APPLIED APPLICANTS: Applied Search Committee, Department of Mathematics, UNC-CH, CB #3250 Phillips Hall, Chapel Hill, NC 27599-3250. Applications will be reviewed until the positions are filled. Preference will be given to applications received by January 1, 2002. UNC-CH is an EO/ADA Employer.

UNIVERSITY OF NORTH TEXAS - DEPARTMENT OF MATHEMATICS - The Mathematics Department expects to have a tenured or tenure track positions to fill for 2002-2003 pending administrative approval. Preference will be given to applicants whose area of research is differential equations, although strong candidates in any area of pure or applied mathematics would be considered. The teaching load is two courses per semester. The department offers undergraduate and graduate degrees in mathematics including the Ph.D. degree. The search committee will begin reviewing applications after December 1, 2001 and continue to consider applications until the positions are filled. The University of North Texas is an ADA/AA/EOE that encourages applications from minority group members and women. Apply online at http://www.mathjobs.org or send vita, three letters of recommendation, transcripts, and cover letter to: Search Committee, Department of Mathematics, P.O. Box 311430, University of North Texas, Denton, TX 76203-1430.

UNIVERSITY OF NORTH TEXAS - DEPARTMENT OF MATHEMATICS - The Mathematics Department expects to have a tenured or tenure track position to fill for 2002-2003 pending administrative approval. The department seeks an individual with a strong mathematics background who is actively involved in Mathematics Education Research. Candidate will also be expected to establish strong collaborations with area public education. The teaching load is two courses per semester. The department offers undergraduate and graduate degrees in mathematics including the Ph.D. degree. The search committee will begin reviewing applications after December 1, 2001 and continue to consider applications until the position is filled. The University of North Texas is an ADA/AA/EOE that encourages applications from minority group members and women. Apply online at http://www.mathjobs.org or send vita, three letters of recommendation, transcripts, and cover letter to: Search Committee, Department of Mathematics, P.O. Box 311430, University of North Texas, Denton, TX 76203-1430.

UNIVERSITY OF NOTRE DAME - DEPARTMENT OF MATHEMATICS - Regular Position in Stochastic Analysis - The Department of Mathematics of the University of Notre Dame invites applications for a position in the field of Applied Stochastic Analysis to start on August 24, 2001. The position is at the tenure track level, but a tenured appointment may be possible for an exceptional candidate. The teaching load is one course one semester and two courses the other semester. The salary is competitive. Applications, including a curriculum vitae, a letter of application, and a completed AMS standard cover sheet, should be sent to: Steven A. Buechler, Chair, Department of Mathematics, University of Notre Dame, Notre Dame, IN 46556. Applicants should also arrange for at least three letters of recommendation to be sent to the chair. These letters should address the applicant's research accomplishments and supply evidence that the applicant has the ability to communicate articulately and teach effectively. Notre Dame is an equal opportunity employer. Women and minorities are urged to apply. The evaluation of candidates will begin December 1. Information about the department is available at http://www.math.nd.edu/math

UNIVERSITY OF NOTRE DAME - DEPARTMENT OF MATHEMATICS - Regular Position in Mathematics - The Department of Mathematics of the University of Notre Dame invites applications for the John P. McAndrews Assistant Professorship in Mathematics starting August 24, 2001. Outstanding candidates in any field of pure or applied mathematics are encouraged to apply. The position is at the tenure track level, though a tenured associate professor appointment may be possible for an exceptional candidate. The teaching load is one course one semester and two courses the other semester. Salaries are competitive and a research fund is included. Applications, including a curriculum vitae, a letter of application, and a completed AMS standard cover sheet, should be sent to: Steven A. Buechler, Chair, Department of Mathematics, University of Notre Dame, Notre Dame, IN 46556. Applicants should also arrange for at least three letters of recommendation to be sent to the chair. These letters should address the applicant's research accomplishments and supply evidence that the applicant can communicate articulately and teach effectively. Notre Dame is an equal opportunity employer. Women and minorities are urged to apply. The evaluation of candidates will begin December 1. Information about the department is available at http://www.math.nd.edu/math.

UNIVERSITY OF PENNSYLVANIA - DEPARTMENT OF MATHEMETICS - Junior Positions in Mathematics - Several positions (including a possible tenure track position) will be available beginning July 1, 2002. Candidates should have strong research credentials and be recognized as potentially successful teachers of undergraduate and graduate students. Send resume and three letters of reference to the Personnel Committee, Department of Mathematics, University of Pennsylvania, Philadelphia, PA 19104-6395. The University of Pennsylvania is an equal opportunity, affirmative action employer.

UNIVERSITY OF PENNSYLVANIA - DEPARTMENT OF MATHEMATICS - Tenure Positions in Mathematics - We anticipate that commencing July 1, 2002, there may be one or more tenure positions available in the following areas (in alphabetical order): algebra, analysis, applied mathematics, discrete mathematics and geometry/topology. These positions are for candidates with outstanding, internationally recognized research achievements who are successful teachers of undergraduate and graduate students. Rank and salary will depend upon experience. Write to: Personnel Committee, Department of Mathematics, University of Pennsylvania, Philadelphia, PA 19104-6395. The University of Pennsylvania is an equal opportunity, affirmative action employer.

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THE UNIVERSITY OF OKLAHOMA - DEPARTMENT OF MATHEMATICS - Applications are invited for one or more full-time, tenured track position(s) beginning 16 August 2002. The position is initially budgeted at the assistant professor level, but an appointment at the associate professor level may be possible for an exceptional candidate with qualifications and experience appropriate to that rank. Normal duties consist of teaching two courses per semester, conducting research, and rendering service to the Department, University, and profession at a level appropriate to the faculty member's experience. The position(s) requires an earned doctorate and research interests that are compatible with those of the existing faculty; preference will be given to applicants with potential or demonstrated excellence in research and prior successful undergraduate teaching experience. Salary and benefits are competitive. For full consideration, applicants should send a completed AMS cover sheet, curriculum vitae, a description of current and planned research, and have three letters of recommendation (at least one of which must address the applicant's teaching experience and proficiency) sent to: Search Committee, Department of Mathematics, University of Oklahoma, 601 Elm, PHSC 423, Norman, OK 73019-0315, Telephone: 405-325-6711, FAX: 405-325-7484, Email: search@math.ou.edu. Screening of applications will begin on December 15, 2001 and will continue until the position is filled. The University of Oklahoma is an Equal Opportunity/Affirmative Action Employer. Women and Minorities are Encouraged to Apply. OU has a policy of being responsive to the needs of dual-career couples.

UNIVERSITY OF OREGON - DEPARTMENT OF MATHEMATICS - Applications are invited for one tenure-track Assistant Professor position and one tenure-track Associate or Assistant Professor position in mathematics beginning in September 2002. Qualifications are a Ph.D. in the mathematical sciences, an excellent record of research accomplishment, and evidence of teaching ability. All applicants from pure mathematics, applied mathematics and statistics will be considered. We particularly encourage applications in analysis, PDE's, applied mathematics, and numerical analysis, but we will not limit our search to these areas. Competitive salary with good fringe benefits. Send complete resume and at least three letters of recommendation to: Search Committee, 1222 Department of Mathematics, University of Oregon, Eugene, OR 97403-1222. Closing date is January 7, 2002. Women and minorities are encouraged to apply. An EO/AA/ADA Institution committed to diversity.

UNIVERSITY OF OREGON - DEPARTMENT OF MATHEMATICS - Applications are being accepted for a **two year postdoctoral position** in mathematics or mathematical statistics beginning September 2002. This is a research position with a reduced teaching load. Qualifications are a Ph.D. in the mathematical sciences, research accomplishment, and evidence of teaching ability. Preference 0 will be given to candidates with research interests that complement those currently represented. Competitive salary and excellent fringe benefits. Send complete resume and three letters of recommendation to: **Hiring Committee**, **Mathematics Department**, **1222 University of Oregon**, **Eugene**, **OR 97403-1222**. Closing date is Jan.7, 2002. Women and minorities are encouraged to apply. An EO/AA/ADA Institution committed to cultural diversity.

UNIVERSITY OF SAN DIEGO - DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE - USD, an independent Catholic University, seeks applicants for a tenure-track Assistant Professor position in the Department of Mathematics and Computer Science to begin September, 2002. Candidates must have a Ph.D. in mathematics, applied mathematics or statistics. Expertise in applied mathematics or statistics is desirable, but all highly qualified candidates are encouraged to apply. The teaching load is effectively 3 three-hour undergraduate courses per semester. Faculty are expected to have a strong commitment to excellence in teaching and maintain active scholarly pursuits. Send resume, three letters of recommendation, and a summary of recent teaching evaluations to: Math Search Committee, Department of Mathematics and Computer Science, University of San Diego, 5998 Alcala Park, San Diego, CA 92110. USD is an AA/EOE employer. Priority will be given to applications arriving by January 16.

THE UNIVERSITY OF TEXAS AT AUSTIN - DEPARTMENT OF MATHEMATICS - Openings for Fall 2002 include: (a) Instructorships, some that have R.H. Bing Faculty Fellowships attached to them and others that are VIGRE Instructorships, and (b) four or more positions at the tenure-track/tenure level. (a) Instructorships at The University of Texas at Austin are postdoctoral appointments, renewable for two additional years. It is assumed that applicants for Instructorships will have completed all Ph.D. requirements by August 28, 2002. Other factors being equal, preference will be given to those whose doctorates were conferred in 2001 or 2002. Candidates should show superior research ability and have a strong commitment to teaching. Consideration will be given only to persons whose research interests have some overlap with those of the permanent faculty. Duties consist of teaching undergraduate or graduate courses and conducting independent research. The projected salary is \$39,000 for the nine-month academic year. Each R.H. Bing Fellow holds an Instructorship in the Mathematics Department, with a teaching load of two courses in one semester and one course in the other. The combined Instructorship-Fellowship stipend for ninemonths is \$42,000, which is supplemented by a travel allowance of \$1,000. Pending satisfactory performance of teaching duties, the Fellowship can be renewed for two additional years. Applicants must show outstanding promise in research. Bing Fellowship applicants will automatically be considered for other departmental openings at the postdoctoral level, so a separate application for such a position is unnecessary. VIGRE Instructorships are partially funded by an NSF VIGRE Grant awarded to the department (in partnership with the Texas Institute for Computational and Applied Mathematics). The combined Instructorship-VIGRE Postdoctoral Fellowship carries a nine-month stipend of \$40,000, with an annual allocation of \$2500 to cover equipment, supplies, and travel. The position also includes summer support in the amount of \$6500 for the first two summers of the appointment. The teaching load for VIGRE Instructors is one course per semester. Only citizens, nationals and permanent residents of the U.S. are eligible for VIGRE Instructor appointments. Furthermore, a VIGRE Instructor must have received the Ph.D. within eighteen months of the date the appointment becomes effective. All eligible applicants for postdoctoral positions in either the Mathematics Department or TICAM will automatically be considered for a VIGRE Instructorship. Those wishing to apply for Instructor positions are asked to send a vita and a brief research summary to the above address c/o Instructor Committee. Transmission of the preceding items via e-mail (address: instructor@math.utexas.edu) is encouraged. (b) An applicant for a tenure-track or tenured position must present a record of exceptional achievement in her or his research area and must demonstrate a proficiency at teaching. In addition to the duties indicated above for Instructors, such an appointment will typically entail the supervision of M.A or Ph.D. students. The salary will be commensurate with the level at which the position is filled and the qualifications of the person who fills it. Those wishing to apply for tenure-track/tenure positions are asked to send a vita and a brief research summary to the Recruting Committee, Department of Mathematics, University of Texas at Austin, Austin, TX 78712. Transmission of the preceding items via e-mail (address: recruit@math.utexas.edu) is encouraged. All applications must be supported by three or more letters of recommendation, at least one of which speaks to the applicant's teaching credentials. The screening of applications will begin on December 1, 2001. The University of Texas at Austin is an equal opportunity employer.

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UNIVERSITY OF WATERLOO - THE DEPARTMENT OF COMBINATORICS AND OPTIMIZATION - The Department of Combinatorics and Optimization at the University of Waterloo invites applications for one or more tenure-track faculty positions, in any area of combinatorics and optimization, but especially in cryptography or quantum computing. While the intention is to make appointments at the rank of Assistant Professor, applications for positions at other ranks will be considered. A Ph.D. and significant evidence of ability in research and the potential for effective teaching are required. Responsibilities will include the supervision of graduate students, as well as teaching at the undergraduate and graduate levels. Successful candidates in cryptography or quantum computing will participate in the Centre for Applied Cryptographic Research or a proposed Institute for Quantum Computation at the University of Waterloo. Salary will depend on the candidate's qualifications. Effective date of appointment: July 1, 2002. These appointments are subject to the availability of funds. Canadians and permanent residents will be considered first for these positions. The University of Waterloo encourages applications from all qualified individuals, including women, members of visible minorities, native peoples, and persons with disabilities. Interested individuals should send curriculum vitae, selected reprints/preprints and the names of three references to: Prof. W.H. Cunningham, Chair, Department of Combinatorics and Optimization, Faculty of Mathematics, University of Waterloo, Email: combopt@math.uwaterloo.ca. Phone: (519) 888-4567 x3482. Fax: (519) 725-5441. Web: Waterloo, Ontario, Canada N2L 3G1. http://www.math.uwaterloo.ca/CandO_Dept/homepage.html. Closing date for receipt of applications is December 15, 2001.

UNIVERSITY OF WISCONSIN, MADISON - DEPARTMENT OF MATHEMATICS - The Department of Mathematics anticipates openings for three positions to begin August 26, 2002, at the tenure-track (assistant professor) level. Appointment at the beginning associate professor level (tenured) will be considered for exceptional candidates, but strong preference will be given to hiring at the assistant professor level. Applications are invited in all areas of mathematics. Candidates should exhibit evidence of outstanding research potential, normally including significant contributions beyond the doctoral dissertation. A strong commitment to excellence in instruction is also expected. Additional departmental information is available on our website: http://www.math.wisc.edu. Applicants should send a completed AMS standard cover sheet, a curriculum vita which includes a publication list, and brief descriptions of research and teaching to: Hiring Committee, Dept. of Mathematics, Van Vleck Hall, University of Wisconsin, Madison, 480 Lincoln Drive, Madison, WI 53706-1388. Applicants should also arrange to have sent to the above address, three to four letters of recommendation, at least one of which must discuss the applicant's teaching experiences and capabilities. Review of applications will begin on November 15, 2001. Applications will be accepted until the positions are filled. Additional letters will be solicited by the Department for candidates who are finalists for a tenured position. The Department of Mathematics is committed to increasing the number of women and minority faculty. The University of Wisconsin is an Affirmative Action, Equal Opportunity Employer and encourages applications from women and minorities. Unless confidentiality is requested in writing, information regarding the applicants must be released upon request. Finalists cannot be guaranteed confidentiality.

UNIVERSITY OF WISCONSIN, MILWAUKEE - DEPARTMENT OF MATHEMATICAL SCIENCES - The Department of Mathematical Sciences anticipates three openings for tenure-track Assistant Professorships, starting August 2002, subject to budgetary approval. The Department invites applications in Algebra, Dynamical Systems, and Numerical Analysis. Candidates must have a strong research record, evidence of or strong potential for extramural funding, and a demonstrated commitment to teaching excellence. A successful candidate for the Dynamical Systems position will have interdisciplinary interests; potential collaborations include, but are not limited to, Industrial Mathematics, Atmospheric Science, and Computer Science. Responsibilities include: teaching two courses per semester and taking an active role in the undergraduate, Master's, and Ph.D. programs. Additional information is available at http://www.math.uwm.edu/. Applicants should send the AMS Standard Cover Sheet, a vita, a description of their research program, and a teaching statement to the Hiring Committee, Department of Mathematical Sciences, University of Wisconsin at Milwaukee, Milwaukee, WI 53201-0413 postmarked by January 7, 2002. At least three letters of recommendation should be sent to the Hiring Committee by the deadline; at least one letter should address the applicant's teaching experience and capabilities. UW-Milwaukee is an EEO/AA Employer. Applications from female and minority candidates are strongly encouraged.

UNIVERSITY OF WISCONSIN, RIVER FALLS - DEPARTMENT OF MATHEMATICS - Applications are invited for a tenure track position in mathematics beginning Fall 2002-2003. Earned doctorate in a mathematical discipline required by August 26, 2002. Applicant must provide evidence of excellence in teaching at the undergraduate level. Teaching duties regularly include one or more upper division courses. A strong commitment to teaching undergraduates at the freshmen/sophomore level is required as well. A normal teaching load is 12 credits per semester. The department expects a willingness to work with students in undergraduate research, as well as collaboration in research and in curriculum development with faculty from within and outside of the department. In addition to teaching and scholarly activity, this position entails campus-wide and departmental service, along with academic advising. Inquiries and applications should be addressed to: Robert Coffman, Department of Mathematics, UW-River Falls, River Falls, WI 54022. Email Robert.L.Coffman@uwrf.edu. Submit a letter of interest, specifying 1) qualifications, and 2) statement of experience, including ability to contribute to the enhancement of student awareness and appreciation of diverse cultures. Include vitae, complete transcripts (official transcripts required for appointment), and three recent letters of recommendation, including one addressing teaching effectiveness. Also include the names, addresses, and telephone numbers of at least three references who can specifically comment upon your teaching ability, experience, and professional preparation. To ensure consideration, a completed application should be received by January 15, 2002. Screening may continue until position is filled. UW-River Falls is an EO/AA employer.

URSINUS COLLEGE - DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE - Ursinus College invites applications for a tenure-track position as Assistant Professor of Mathematics starting Fall 2002. A Ph.D. is required by the date of commencement of teaching. All specialties will be considered, but we are especially interested in specialties that can support undergraduate research. The successful candidate will demonstrate interest in and potential for excellence in teaching and research in a liberal arts setting. Preference will be given to those candidates with an interest or experience in teaching non-majors. Responsibilities include teaching (three courses per semester) departmental courses or appropriate interdepartmental courses, such as freshman seminar, as well as supervision of undergraduate research and internships. Ursinus College is a highly selective, independent, co-educational, residential liberal arts college of 1325 students located about 25 miles from center city Philadelphia. Ursinus College is an equal opportunity employer (AA/EOE). In keeping with the College's historic commitment to equality, women and minorities are encouraged to apply. Visit the Ursinus homepage at http://www.ursinus.edu/. Send letter of application, resume, statement about undergraduate research in mathematics, transcripts, and three letters of recommendation to Search Committee Chair, Professor Nancy Hagelgans, Department of Mathematics and Computer Science, Ursinus College, P.O. Box 1000, Collegeville, PA 19426. Review of applications will begin mid-November and continue until the position is filled. Preliminary interviews will take place at the Joint Mathematics Meetings in January 2002.

For AWM EVENTS at the Joint Mathematics Meetings -- see PAGE 51

ADVERTISEMENTS

WASHINGTON UNIVERSITY IN ST. LOUIS - DEPARTMENT OF MATHEMATICS - Opening for one tenure track faculty position at the rank of Assistant Professor. Starting date: Fall of 2002. Teaching load: three courses per year. Applicants should have research interests that mesh with those of our permanent faculty. These interests include algebraic geometry, commutative algebra, differential geometry, dynamical systems, harmonic analysis and wavelets, low-dimensional topology, operator theory, partial differential equations, real and complex analysis, statistics and combinatorics. Please have up to six letters of recommendation sent to the Chair, Department of Mathematics, Washington University, One Brookings Drive, Campus Box 1146, St. Louis, MO 63130. Email: chairman@math.wustl.edu. At least one of these letters should report on the candidate's teaching abilities. We will begin reviewing applications on December 15, 2001, and will continue reviewing applications until the position is filled. Washington University is an affirmative action/equal opportunity employer and specifically invites and encourages women and minorities to apply. To be eligible, an applicant must have the Ph.D. degree before beginning employment. Employment eligibility verification required on hire. Deadline for Applications: December 31, 2001 For more information about the position or institution/company: http://www.math.wustl.edu

WASHINGTON UNIVERSITY IN ST. LOUIS - DEPARTMENT OF MATHEMATICS - Opening for one or more William Chauvenet Assistant Professorships. These are two-year, non tenure-track faculty positions. Applicants should be three years or less from the Ph.D. Starting date: Fall of 2002. Teaching load: three courses per year. Applicants should have research interests that mesh with those of our permanent faculty. These interests include algebraic geometry, commutative algebra, differential geometry, dynamical systems, harmonic analysis and wavelets, low-dimensional topology, operator theory, partial differential equations, real and complex analysis, statistics and combinatorics. To apply, send a vita and a research plan. Have three letters of recommendation sent directly to the Chair, Department of Mathematics, Washington University, One Brookings Drive, Campus Box 1146, St. Louis, MO 63130. At least one of these letters should report on the candidate's teaching abilities. We will begin reviewing applications on December 1, 2001 and continue reviewing applications until the position is filled. Washington University is an affirmative action/equal opportunity employer and specifically invites and encourages women and minorities to apply. Employment eligibility verification required on hire. Deadline for Applications: December 1, 2001. For more information about the position or institution/company: http://www.math.wustl.edu.

WAYNE STATE UNIVERSITY - DEPARTMENT OF MATHEMATICS - Applications are invited for a possible tenure-track position at the rank of Assistant/Associate Professor in any area of specialization. Applications from female and minority candidates are particularly encouraged. There is also the possibility of visiting positions for 2002-2003 in any area of mathematics. Ph.D. in mathematics and a strong interest in research and teaching are required for all positions. Applications should include a signed, detailed vita, description of current research interests, and four letters of recommendation, including one addressing teaching. Solid evidence of excellence in teaching at the undergraduate level is preferred over a statement of teaching philosophy. Applications received by January 1, 2002 will be given priority. Wayne State University is an equal opportunity/affirmative action employer. Wayne State University - People working together to provide quality service. All buildings, structures and vehicles at WSU are smoke-free. Lowell J. Hansen, Chair, Wayne State University, College of Science, Department of Mathematics, Detroit, Michigan 48202. (313) 577-2479; (313) 577-7596 FAX

WESTERN KENTUCKY UNIVERSITY - DEPARTMENT OF MATHEMATICS - Positions available for department head and two tenure-track faculty. Candidate should have doctorate and commitment to excellence in teaching and research. Details about the positions and application process are available at www.wku.edu./Mathematics. WKU is an EO/AA employer.

WESTERN MICHIGAN UNIVERSITY - DEPARTMENT OF STATISTICS - Assistant Prof. (tenure-track). Doctorate in Biostatistics or Statistics required. Training in management/analysis of large databases desirable. Ideally will develop a research program with biosciences faculty and students. Western Michigan University, a student centered research university, encourages applications from underrepresented groups. Application review begins 1 November 2001. Applications accepted until position is filled. Send cover letter, vita, research/teaching philosophy, graduate transcripts, three recommendations to: Daniel Mihalko(mihalko@wmich.edu), Department of Statistics, Western Michigan University, Kalamazoo, MI 49008-5278.

YALE UNIVERSITY - DEPARTMENT OF MATHEMATICS - Yale University applications accepted for Gibbs Instructorships/Assistant Professorships for Ph.D. with outstanding promise in research in pure Mathematics. Appointments are for two/three years, starting July 2002. The teaching load for Gibbs Instructors/Assistant Professors will be kept light, so as to allow ample time for research. This will consist of three one-semester courses per year. Part of the duties may consist of a one-semester course at the graduate level in the general area of the instructor's research. Applications and supporting materials must be received by January 1, 2002. Offers will be made during February. Salary at least \$49,800. Applications are available at: http://www.math.yale.edu. Applications and supporting materials may be sent via U.S. mail to: The Gibbs Committee, Department of Mathematics, Yale University, P.O. Box 208283, New Haven, CT 06520-8283 or via email to: gibbs.committee@math.yale.edu. Applications from women and members of minority groups are welcome. Yale is an Affirmative Action/Equal Opportunity Employer.

YORK UNIVERSITY - DEPARTMENT OF MATHEMATICS - Applications are invited for a tenure-track appointment at the Assistant Professor level in the Department of Mathematics and Statistics to commence July 1, 2002. Applications in Algebra, Logic, or related areas will be considered. The successful candidate must have a PhD and is expected to have a proven record of research and superior teaching ability. Preference will be given to candidates who can strengthen existing areas of present and ongoing research activity. The selection process will begin on January 7, 2002. Applicants should send resumes and arrange for three letters of recommendation (one of which should address teaching) to be sent directly to: Pure Mathematics Search Committee, Department of Mathematics and Statistics, York University, 4700 Keele Street, Toronto, Ontario, Canada, M3J 1P3. Fax: (416) 736-5757. E-mail: pure-recruit@mathstat.yorku.ca, www.math.yorku.ca/Hiring/. In accordance with Canadian immigration requirements, Canadian citizens and permanent residents will be considered first for this position. All positions at York are subject to budgetary approval. For many years, York University has had a policy of employment equity including affirmative action for women faculty and librarians. Recently, York has included racial/visible minorities, persons with disabilities and aboriginal peoples in its affirmative action program. Persons who are members of one or more of these three groups are encouraged to self identify during the selection process. Please note that candidates from these three groups will be considered within the priorities of the affirmative action program only if they self identify. The Department of Mathematics and Statistics welcomes applications from women, racial/visible minorities, persons with disabilities and aboriginal peoples. The affirmative action program can be found on York's website at www.yorku.ca or a copy can be obtained by calling the affirmative action office at 416-736-5713.

A W M

Association for Women in Mathematics 2000/2001 MEMBERSHIP FORM

LAST NAME ADDRESS	FIRST NAME	M.I.	AWM's membership year is from 0 Please fill-in this information and return AWM Mem 4114 Computer & Spac University of College Park, MI The AWM Newsletter is published si membership. Any questions, contact (301) 405-7892 or refer to our website.	rn it along with your DUES to: bership e Sciences Building Maryland D 20742-2461 x times a year and is part of your ct AWM at awm@math.umd.edu;
Email: Date of Birth (optional) PROFESSIONAL INFO Position: Institution/Company: City, State, Zip: DEGREES EARNED:		Home Phone: do not publish home (MMDDYYYY) [th	ne date of birth field is to strictly help prevent d If student, GRADUATE or UN If <u>not</u> employed, leave po	IDERGRADUATE (circle one)
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CATEGORY 2 CATEGORY 2 ADVERTISING: Institution year Oct. 1st to Sept. 30 2a and 2b). *Eligible a does not apply to Newsladvertising deadlines and Institutions have the option	2A (includes 3 student mental members on Categories of the All institutional members dvertisements: The institution etter display ads. If institutione the 1st of every EVEN montal tion to nominate students to	nberships; 1 free ad; 10 nberships; 10% off New 1 and 2a receive ONE is receive discounts on onal discount applies to nal dues have not been h. All institutions advert receive the newsters.	25% off additional Newsletter & online ads *0% off additional Newsletter & online ads *) wsletter & online ads as well the received by the invoice date, the full advertis tising are Affirmative Action/Equal Opportunity as part of their membership. List names and s) to the listed institutional rate for each studer students for Category 2b]. For more info see	\$125 If (up to 4 lines) for the membership tegory 1 and 10% off for Categories I as classified <i>Newsletter</i> ads, but it ing rate will be charged. <i>Newsletter</i> Employers. STUDENT NOMINEES: addresses of student nominees on the add-on over the initial 10 students
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Aum Events

AWM would like to invite you to our events to be held in conjunction with the Joint Mathematics Meetings San Diego Convention Center, San Diego, California, January 6 - 9, 2002

Preliminary Schedule of AWM Events as of October 5, 2001

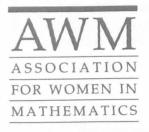
	Preliminary Schedule of AW	M Events as of October 5, 2001			
Sunday, January 6th	LOCATION (subject to change)				
3:20 p.m 4:30 p.m.	Panel Discussion: "Mathematics after high school Organizers: Cathy Kessel, AWM President S	Room 14 B, Convention Ctr.			
J 14	& Oak Ridge National Lab. and Teri Jo Murphy , University of Oklahoma. Moderators: Teri Jo Murphy, University of Oklahoma and Bettye Anne Case, Florida State University				
	Panelists: Rebecca Ambrose, San Diego State	University Melinda W Cortain University	University		
	Madison , Cathy Kessel & Judy Walker, Univ	ersity of Nebraska Lincoln	of Wisconsin,		
	At conclusion of panel, AWM will recognize the 12th	h Annual Alice T. Schafer Prize honorees [wint	per rupper(e)-up & honorable mention(e) 1		
4:35 p.m 5:00 p.m.	Business Meeting	Trize nonorees (with	Room 14 B, Convention Ctr.		
6:00 p.m 8:15 p.m.	Noether Dinner	Location: to be appounded			
	AWM will have a get-together with the Noethe a sign-up sheet will be at the AWM Table in th	r Lecturer for a casual dinner. If you would lil e exhibit area or at the AWM Panel on Sunda	ce to join us		
9:30 p.m.	Reception entire math community invited; refreshments & cash bar available.		Marina Ballroom Foyer,		
Mondo			Marriott		
Monday, January 7th					
9:00 a.m 9:50 a.m.	23rd Annual Emmy Noether Lecture:		Room 6 A/B		
	"Computing over the Reals: Where Turing meets Newton presented by Lenore Blum, Carnegie Mellon University		Convention Ctr.		
4:25 p.m 7:00 p.m.	Joint Prize Session: Presentation to the winners		Room 6 A/B,		
	12th Annual Louise Hay Award for Contributi	ons to Mathematics Education and the	Convention Ctr		
	12th Annual Alice T. Schafer Prize for Excellence in Mathematics by an Undergraduate Woman				
Tuesday I	These award presentations are held in conjunc	tion with the Joint Prize Session . A cash b	ar reception will immediately follow.		
Tuesday, January 8th					
6:30 p.m 9:30 p.m.	AWM Workshop Dinner [for Workshop presenters,	mentors, panelists & organizers]	Location: to be announced		
Wednesday, January 9	9th				
8:20 a.m 4:00 p.m.	AWM WORKSHOP: presentations by Women Graduate Students& Recent Ph.D.'s The entire math community is invited to attend all Workshop presentations. Room 6 F, Convention Ctr.				
	The AWM Workshop is supported by the Air Fo	rce Office of Scientific Research and the Offi	ce of Naval Research		
Colorado	Organizers: Gail Ratcliff, University of Missouri, St. L	ouis, Sue Geller, Texas A&M University & Jodie D	Novak, University of Northern		
8:30 a.m 10:30 a.m.	AWM sponsored research talks by recent wome	n Ph.D.'s I			
8:30 a.m 8:50 a.m.	Sara Faridi, George Washington University "Simplicial Complexes in Commutative				
9:00 a.m 9:20 a.m.	Adela Vraciu, University of Kansas	"Tight closure and linkage"	ora		
9:30 a.m 9:50 a.m.	Ana Bravo, University of Michigan	"Algorithms of resolution of singularities: Re	cent results"		
10:00 a.m 10:20 a.m.	Yevgenia Kashina, Syracuse University	"From Groups to Honf Algebras"			
10:30 a.m 12:00 p.m.	AWM sponsored Poster Session featuring Grade	uate Students(light refreshments will be availa	able)		
	Karen Ball, University of Maryland, College Park	"Entropy and Equivalence of Random Walks on Random Sceneries"			
	Robin Endelman, University of Cincinnati	"A New 2-parameter Variation of the Quantu	"A New 2-parameter Variation of the Quantum Yang-Baxter Equation"		
	Suzanne Lynch Hruska, Cornell University Reva S. Kasman, University of Illinois at Chicago	"Hyperbolicity in the Complex Hénon Family"			
	Oana Mocioalca, University of Florida	"Norms and the Bieri-Neumann-Strebel Invariant"			
	Karen Ricciardi, University of Vermont	"Summable processes"			
	Karen Ricciardi, University of Vermont "The Modified Tunneling Approach to Solving a Nonlinear Optimization Problem Applied to Groundwater Remediation Design"				
	Svetlana Roudenko, Michigan State University	"Function Spaces with Matrix Weights, and Applications to Wavelets"			
	Jessica Sidman, University of Michigan	"The Castelnuovo-Mumford regularity of sub:	"The Castelnuovo-Muniford regularity of subspace arrangements"		
	Linda B. Smolka, Pennsylvania State University	"Filament Dynamics of Non-Newtonian Fluid	"Filament Dynamics of Non-Newtonian Fluids"		
	Katherine Socha, University of Texas at Austin	"Sand and Sea: Analysis of a Model of Coasto	"Sand and Sea: Analysis of a Model of Coastal Sandbar Formation"		
	Sarah A. Spence, Cornell University "Generalized coset codes and lattices"				
12:00 p.m 1:00 p.m.	Elizabeth A. Stanhope, Dartmouth College	"Using Geometry to Bound Homotopy Types i	n 2-orbifolds with Isolated Singularities"		
1:00 p.m 2:30 p.m.	AWM Lunch [for Workshop presenters, mentors, panel Panel Discussion: "Launching a Career in Mathematical Indianation, Lodie Noval, University of Noval, Color	natics"	Room 6 F, Convention Ctr. Room 6 F, Convention Ctr.		
2:30 p.m 4:30 p.m.	Moderator: Jodie Novak, University of Northern Colora AWM sponsored research talks by recent women	do Panelists: TBA			
2:30 p.m 2:50 p.m.	Jianyuan Kathy Zhong, Louisiana Tech University				
From more posts		"Hecke Algebras and Homflypt Skein Modules" "An algorithmic approach to the important of the state of the st			
3:00 p.m 3:20 p.m.					
3:00 p.m 3:20 p.m. 3:30 p.m 3:50 p.m.	Mireille (Mimi) Boutin, Brown University Rodica D. Costin, Rutgers University	"An algorithmic approach to the invariant app "Location and type of singularities of generic	proximation of differential invariants"		

For more details on the above events, please see the following websites: www.ams/org/amsmtgs or www.awm-math.org.

At the meeting, please stop by the AWM Table in the Exhibit area for an AWM Events Program or refer to the Joint Meetings Program.

Volume 31, Number 6, November-December 2001

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