FOCUS

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invited ADDRESSES

HEDRICK-LECTURE SERIES

WAVELETS IN ACTION

Ingrid Daubechies, Princeton University

LECTURE 1: WAVELETS IN APPROXIMATION THEORY

Thursday, August 2, 9:30 am - 10:20 am

Wavelets have known many successes since the first development of wavelet bases (other than the Haar basis) in the 1980s. Most of these successes are related to the way wavelets provide a "mathematical zoom," probing into properties of functions or operators at many scales simultaneously. In turn, these properties are related to deep mathematical roots, in approximation theory and harmonic analysis. This lecture will explain what wavelets are, how to construct them, and go into some of their approximation properties, via convergence theorems.

LECTURE 2: WAVELETS AND SIGNAL COMPRESSION

Friday, August 3, 9:30 am - 10:20 am

Because wavelets are useful in many frameworks of approximation, they are also a good tool to describe certain types of signals succinctly. In other words, they are efficient in signal compression. This lecture will make the link from the mathematical properties of wavelets to estimates that are closer to signal compression reality.

LECTURE 3: WAVELETS AND SUBDIVISION

Saturday, August 4, 9:30 am - 10:20 am

Wavelets are closely linked to subdivision schemes, which have been used for several decades for curve and surface construction, and which are constantly gaining more "fans" in computer-aided graphic design. This lecture will review subdivision, explain the connection with wavelets, and end with examples illustrating the usefulness of these ideas in computer graphics.

MAA-NAM DAVID BLACKWELL LECTURE

LIMIT THEOREMS FOR A LARGE NETWORK IN WHICH CUSTOMERS JOIN THE SHORTEST QUEUE AMONG SEVERAL

Carl Graham, Centre de Mathématiques Appliqué (CMAP) Palaiseau, France

Thursday, August 2, 8:30 am - 9:20 am

MAA INVITED ADDRESS

NEWTONIANISM IN ACTION

Judith Grabiner, Pitzer College

Thursday, August 2, 10:30 am - 11:20 am

MAA INVITED ADDRESS

PROOF OF THE DOUBLE BUBBLE CONJECTURE

Frank Morgan, Williams College

Friday, August 3, 8:30 am - 9:20 am

JAMES R.C. LEITZEL LECTURE

WHAT I HAVE LEARNED FROM THE MATHEMATICS COMMUNITY

Robert F. Witte, Exxon Mobil Foundation

Friday, August 3, 10:30 am - 11:20 am

PI MU EPSILON J. SUTHERLAND FRAME LECTURE

TWICE AS OLD, AGAIN, AND OTHER FOUND PROBLEMS

Thomas F. Banchoff, Brown University

Friday, August 3, 8:00 pm - 9:00 pm

AWM-MAA INVITED ADDRESS

THE SCHOLARSHIP OF LEARNING AND TEACHING: A LOOK BACK AND A LOOK AHEAD

Patricia Shure, University of Michigan

Saturday, August 4, 8:30 am - 9:20 am

MAA INVITED ADDRESS

THE OTHER LESSONS: WHAT STUDENTS KEEP FOR LIFE

Michael Starbird, University of Texas at Austin

Saturday, August 3, 10:30 am - 11:20 am

special SESSIONS

Special Sessions feature presentations, panel discussions, or invited papers sessions. The speakers are selected and invited by the organizers because of their expertise and accomplishments in the focal area of the session.

SPECIAL SESSION ON PROGRAMS FOR MINORITY STUDENTS AND MINORITY INSTITUTION FACULTY

Thursday, August 2, 1:00 pm - 2:20 pm
William Hawkins, Jr., MAA and the University of the District of Columbia
This panel discussion is sponsored by the SUMMA (Strengthening Underrepresented Minority Mathematics Achievement) Program of the MAA. Panelists will discuss various programs for minority precollege and college students as well as for faculty at minority institutions.

TEACHING MATHEMATICS TO LIBERAL ARTS STUDENTS

Thursday, August 2, 1:00 pm - 2:20 pm
William L. Briggs, University of Colorado at Denver
Teaching mathematics to non-science/math/engineering students (usually liberal arts students) is a major responsibility of most mathematics departments. And yet courses for this audience have only begun to receive the attention that they deserve. This session will feature speakers representing different philosophies about both teaching and designing such courses. The presentations will be practical and interactive.

MAA OPEN DISCUSSION ON A NEW CUPM CURRICULUM GUIDE

Thursday, August 2, 2:30 pm - 3:50 pm
Harriet Pollatsek, Mount Holyoke College
Draft portions of the new CUPM Curriculum Guide (scheduled for publication late in 2002) will be available on MAA Online before MathFest. Panelists from CUPM will briefly summarize key elements and then invite audience comments and questions.

GRANT WRITING: EVERYTHING THAT YOU HAVE ALWAYS WANTED TO KNOW ABOUT THE GRANT WRITING PROCESS FROM THOSE WHO HAVE BEEN AWARDED FUNDING

Friday, August 3, 1:00 pm - 2:20 pm
Sarah Mabrouk, Framingham State College
Topics for discussion include:

- what makes the programs different
- how to determine the most appropriate program in which to apply
- the most important information to include in a grant application
- what one should not include in a grant application
- what additional information, if any, might be helpful to include in a grant application although not required
- what makes a grant application "good" or "bad"
- information about the review process and those who act as reviewers
- what others have to say about their experiences in applying for grants
- helpful information for those writing a first grant application
- how to rewrite a grant application in order to improve the likelihood of being awarded funding when the grant application is resubmitted for consideration
- how to get on-campus support for grant applications especially for grants for which the college/university must contribute

These points are important for anyone who is considering applying for funding. In addition, this session may be beneficial for graduate students, Project NExT participants, and both junior and senior faculty. Of interest to anyone who would like to apply for a grant or to learn more about the grant writing process.

SPECIAL SESSION ON EXPANDING THE VISION: INCREASING THE PARTICIPATION OF WOMEN IN MATHEMATICS

Friday, August 3, 1:00 pm - 2:50 pm
Virginia Gielincki Kasten, General Motors
Kathleen Sullivan, Seattle University
Elizabeth Yanik, Emporia State University
A short keynote address will be followed by a panel discussion. This session is sponsored by the Women and Mathematics Network Committee.

INVITED PAPER SESSION ON SOAP BUBBLE GEOMETRY

Friday, August 3, 3:00 pm - 6:00 pm
Frank Morgan, Williams College

CAN APPLICATIONS BE USED AS THE BASIS FOR A DEVELOPMENTAL MATHEMATICS PROGRAM?

Saturday, August 4, 1:00 pm - 2:20 pm
Solomon Garfunkel, COMAP
Susan Forman, Bronx Community College (CUNY)
Do students in developmental mathematics courses have the tools to take on the challenge of rigorous, authentic applications? How much of the developmental mathematics program can be accomplished through an applications-based approach? This presentation will address these questions and provide concrete examples of applications appropriate for students in these programs.

BUILDING REGIONAL CAPACITY

Saturday, August 4, 1:00 pm - 2:20 pm
Nancy M. Antonellis and Steve Benson
Center for Mathematics Education, Newton, MA
In collaboration with the University of Massachusetts at Lowell, Education Development Center has developed a content-centered professional development program for mathematics teachers, department heads and other lead teachers. Over a two-year period consisting of two two-week summer institutes and academic year work, participants engage in the study of mathematics focusing on significant mathematical ideas in 7–12 curriculum, build capacity to plan and provide professional development opportunities for teachers of mathematics and develop leadership skills necessary to work effectively at district and regional levels. We will describe the project and provide more details about future institutes.

UNIVERSITY ACTUARIAL SCIENCE PROGRAMS, THE HOW-TO

Michael M. Braunstein, ACTEX Publications, Winsted, CT
Saturday, August 4, 1:00 pm - 2:20 pm
A moderated discussion involving the creation, course content, prerequisites, departmental philosophies and politics associated with university actuarial science programs. The moderator, a Fellow of the Society of Actuaries and the Director of the University of Connecticut's Actuarial Science program, shares personal experience, provides pertinent information, and recommends the tools necessary to offer both undergraduate and graduate programs in actuarial science. Specific details concerning appropriate course materials will also be made available. This session is suitable for those who are interested in learning about actuarial science programs and for those who are willing to share their own valuable experience. Students considering the actuarial profession will also find this session helpful. Panelists include Richard London, University of Connecticut.

CREATING AND SUSTAINING NExT-LIKE PROJECTS IN MAA SECTIONS

Saturday, August 4, 3:00 pm - 4:50 pm
Gavin LaRose, University of Michigan
Joe Gallian, University of Minnesota, Duluth
Project NExT is a successful national faculty development program for new mathematicians that works to introduce practices of good teaching, and to integrate the faculty into the profession. To provide similar, more regional, support for new faculty, many MAA Sections are starting or have started NExT-like projects ("Section NExTs"). In this session we will describe what existing Section NExTs look like, examine issues in developing such programs, determine characteristics of successful programs, and consider how to sustain Section NExTs in the long term. Special attention will be paid to issues of how Section NExTs are funded and administered. Participants will include organizers of existing Section NExTs, who will exchange ideas with and answer questions for those attending the session.

SPECIAL SESSION ON THE STATUS OF INTERACTIVE MATHEMATICS TEXTS

Saturday, August 4, 3:00 pm - 6:00 pm
Elias Deeba, University of Houston-Downtown
Dan Kalman, American University
James White, Director, Project WELCOME
This session is intended to revive the interest in interactive texts that was originally initiated by the MAA through the IMTP. The session invites discussion papers, samples of interactive texts and demonstrations that show the effectiveness of utilizing interactive texts in the mathematics instructions.

contributed paper SESSIONS

MAA Contributed Paper Sessions are normally organized around a predetermined topic. Presenters are selected by the paper organizers after reviewing responses to a call for papers.

CREATIVE USE OF TECHNOLOGY IN TEACHING MATHEMATICS

Part 1: Thursday, August 2, 1:00 pm - 3:00 pm
Part 2: Friday, August 3, 1:00 pm - 3:00 pm
Mary L. Platt, Salem State College
Marcelle Bessman, Jacksonville University
This session will focus on innovative uses of technology to support and enhance the learning of mathematics in all college courses. In particular, we are interested in the use of technology to support conceptual understanding and appreciation of the application of mathematical principles to solving real world problems. The paper session is sponsored by the MAA Committee on Computers in Mathematics Education (CCIME).

STRATEGIES FOR IMPLEMENTING RECOMMENDATIONS IN THE MATHEMATICAL EDUCATION OF TEACHERS (MET) DOCUMENT

Part 1: Thursday, August 2, 1:00 pm - 3:00 pm
Part 2: Friday, August 3, 1:00 pm - 3:00 pm
Judith Covington, Louisiana State University - Shreveport
Marjorie Enneking, Portland State University
This session will present courses, programs, and faculty development initiatives for implementing the recommendations for the mathematical preparation of future K-12 teachers. Papers are sought which provide practical information on these mathematics courses and programs and how they are taught. Also welcome are papers that focus on strategies for assisting mathematics faculty in teaching these courses and programs. Papers are also sought which address issues such as identification of undergraduate students interested in teaching, recruitment of good students into teaching, and increasing diversity of the teaching force. All papers should show a clear connection to the Mathematical Education of Teachers document. The course is sponsored by the MAA Committee on the Mathematical Education of Teachers (COMET).

SMOOTHING MATHEMATICAL TRANSITIONS: ARTICULATION EFFORTS BETWEEN INSTITUTIONS

Part 1: Friday, August 3, 3:15 pm - 5:15 pm
Part 2: Saturday, August 4, 1:00 pm - 3:00 pm
Bernard L. Madison, University of Arkansas
Sheldon Gordon, SUNY at Farmingdale
This session invites presentations on efforts to smooth the transition in mathematics education between institutions. The transitions include high school to college, two-year college to four-year college, and between colleges. The impediments to smooth transitions can include variations in curricula and pedagogies, differing levels of use of technology, institutional or system policies, and assessment – including admission, placement, rising, and exit examinations. In addition to how efforts and formal agreements among institutions and systems have smoothed mathematical transitions, presentations can include the negative affects of such efforts. Of particular interest is the effect of articulation agreements on possible curricular innovations. The course is jointly sponsored by the MAA Task Force on Articulation, CUPM (Committee on the Undergraduate Program in Mathematics), CRAFTY (Calculus Reform and the First Two Years), Committee on Two-Year Colleges, Committee on Service Courses, and Committee on Quantitative Literacy.

ARUME: HOW MATHEMATICS EDUCATION RESEARCH CAN INFORM TEACHING

Part 1: Friday, August 3, 2:30 pm - 4:30 pm
Part 2: Saturday, August 4, 3:00 pm - 5:00 pm
Julie M. Clark, Emory & Henry College
Bernadette Baker, Drake University
Pam Crawford, Jacksonville University
This session will be devoted to expositions of research results and uses of research (RUME) in teaching. Summaries of research results together with implications for the classroom or specific examples describing how research results have informed work in actual college classrooms are especially encouraged.

THE USE OF HISTORY IN THE TEACHING OF MATHEMATICS

Thursday, August 2, 2:30 pm - 4:30 pm
Dick Jardine, Keene State College
Amy Shell, U.S. Military Academy
This session invites contributions which describe the use of the history of mathematics in innovative ways to motivate students or to support changes in the mathematics curriculum and pedagogy. Ideas about the use of history to prepare future teachers are especially encouraged. Also invited are submissions which address methodologies and resources for modern historical research relevant to the mathematics classroom experience. Ideas about how to get students actively involved are especially encouraged.

DEPARTMENTAL STRATEGIES FOR TRAINING FACULTY TO USE TECHNOLOGY

Thursday, August 2, 3:15 pm - 5:15 pm
Kirk E. Weller, Bethel College
Janet Andersen, Hope College
Various types of technology are being used with ever-increasing frequency as a pedagogical tool in mathematics classrooms. This trend raises several issues: How does a department integrate the use of technology when courses are taught by different instructors with varying levels of expertise and possibly conflicting teaching philosophies? What types of strategies are available to train faculty to use technology appropriately? How does a department keep current with new advances? How does a department with limited resources incorporate technology in a meaningful way? The purpose of this contributed paper session, sponsored by the MAA Committee on the Teaching of Undergraduate Mathematics (CTUM), is to solicit papers that address these or related questions.

INNOVATIVE METHODS IN COURSES BEYOND CALCULUS

Thursday, August 2, 3:15 pm - 5:15 pm
Richard J. Maher, Loyola University Chicago
Are you doing things a bit differently in an upper division course? And are you having some success doing it? Do your students have a better understanding of the material because of the new methods being used? If so, this session provides you with an opportunity to share your approach with others. Papers presented at this session should discuss both the innovations that are being used in an upper division course and why these innovations have been judged successful.

INNOVATIVE PROGRAMS TO IMPROVE THE TEACHING OF MATHEMATICS

Friday, August 3, 3:15 pm - 5:15 pm
Aaron K. Trautwein, Carthage College
Eric Rawdon, Chatham College
Have you participated in or developed a program to improve your department's teaching of mathematics? Traditional programs to improve the teaching of mathematics by college and university professors are usually evaluative in nature and have primarily examined student and departmental peer assessment. This session will examine innovative, locally created programs which help college and university professors improve their teaching skills or help them develop new approaches to teaching traditional mathematics topics. Such programs may include the use of interdisciplinary teaching teams, teaching seminars, or peer mentoring programs.

TECHNOLOGY BASED MODELING IN MATHEMATICS COURSES

Saturday, August 4, 3:15 pm - 5:15 pm
Rebecca E. Hill, Rochester Institute of Technology
Howard Lewis Penn, U.S. Naval Academy
This session invites papers from any course where computers, calculators or other forms of technology are used as part of a project involving mathematical modeling. Papers that emphasize student projects are especially welcome. Possible questions that could be addressed in the paper session are: How do students choose or are assigned modeling projects? What role does technology play in building and analyzing the models? Is technology used in testing the model and interpreting the results? This paper session is sponsored by the Committee on Computers in Mathematics Education(CCIME).

MAKING GENERAL MATHEMATICS AND PRECALCULUS COURSES OF SERVICE TO MATHEMATICS

Saturday, August 4, 3:15 pm - 5:15 pm
Sarah L. Mabrouk, Framingham State College
General mathematics and precalculus courses, service courses to colleges/universities, can serve mathematics departments by inspiring students and by providing the skills and the mathematical sophistication necessary to enable students to pursue mathematics as a major. Exposure to thought provoking puzzles and proofs, especially proofs without words, and the use of projects, applications to other disciplines, especially those involving real data, and innovative assignments, including those involving creative writing, can help students to view mathematics as real, creative, and enjoyable. This session invites papers describing efforts to use general mathematics and precalculus courses to attract students to study mathematics. Participants are encouraged to discuss course changes made to improve student attitudes and to attract students to study mathematics as well as assignments/projects, demonstrations, and activities used to stimulate interest in mathematics. Of particular interest are professor/student reactions, the ease/difficulty with which changes are made, and the overall effect of course changes.

GENERAL CONTRIBUTED PAPER SESSION

Part 1: Thursday, August 2, 1:00 pm - 5:00 pm
Part 2: Friday, August 3, 1:00 pm - 5:00 pm
Susan E. Kelly, University of Wisconsin - La Crosse
This session is designed for papers that do not fit into one of the other sessions. Papers may be presented on any mathematics related topic. Papers that fit into one of the other sessions should be sent to that organizer, not to this session. Papers should not be sent to more than one organizer. E-mail submissions are preferred.

mini COURSES

Minicourses offer four hours of focused instruction. Enrollment is limited and a separate registration fee is required. Refer to Registration Information for Details.

TEACHING INTRODUCTORY STATISTICS USING A WORKSHOP APPROACH

Part A: Thursday, August 2, 1:00 pm - 3:00 pm
Part B: Friday, August 3, 3:15 pm - 5:15 pm
James H. Albert and Diane Erb,
Bowling Green State University
This minicourse will help instructors teach introductory statistics conforming to recent ASA/MAA recommendations to emphasize statistical thinking with an increased emphasis on data and concepts, and with fewer recipes. A workshop approach will be illustrated where students explore topics in data analysis, probability, and inference by means of directed activities in the classroom. Traditional and Bayesian methods will be compared from the viewpoint of communicating basic tenants of statistical inference. The use of MINITAB and web-based software will be illustrated, and a student survey project will be described as a useful method of assessing the student's learning of statistics.

CWATSETS: A RESEARCH EXPERIENCE FOR UNDERGRADUATES

Part A: Thursday, August 2, 1:00 pm - 3:00 pm
Part B: Friday, August 3, 1:00 pm - 3:00 pm
Gary J. Sherman, Rose-Hulman Institute of Technology
Cwatsets are group-like subsets of binary n-space with surprising algebraic and combinatorial properties whose applications range from statistics to graph theory. We will survey the undergraduate-driven theory of cwatsets, discuss cwatsets as a capstone topic for a discrete mathematics or abstract algebra course, and present an extensive inventory of research questions suitable for undergraduates and their teachers. Participants will receive a packet of technical reports, papers, examples, and questions.

AN INTRODUCTION TO MATHEMATICAL CARD TRICKS

Part A: Thursday, August 2, 3:15 pm - 5:15 pm
Part B: Saturday, August 4, 3:15 pm - 5:15 pm
Colm Mulcahy, Spelman College
Card tricks can be used to liven up many classes for mathematics students, from precalculus and discrete math to abstract algebra and number theory. They also fit well into quantitative reasoning or quantitative literacy courses. This minicourse will present an elementary, interactive introduction to card tricks that are based on simple mathematical ideas, rather than slight of hand. Working in small cluster groups, participants will learn a variety of tricks – from very simple tricks one can do alone to more sophisticated ones requiring an accomplice – along with the underlying principles. The mathematics can be explained to any interested parties, regardless of the level of mathematical training possessed. A 40-page handout, detailing 50 tricks and with an extensive bibliography, will be distributed.

CONTEMPORARY COLLEGE ALGEBRA: A REFORMED COLLEGE ALGEBRA COURSE

Donald Small, US Military Academy
Dorothy Hunter, Huston-Tillotson College
Laurette Foster, Prairie View A&M University
Part A: Thursday, August 2, 3:15 pm - 5:15 pm
Part B: Friday, August 3, 3:15 pm - 5:15 pm
This minicourse will take participants on a typical journey through a college algebra reform program. The trip will include small group project presentations, graphing calculator required assignments, writing assignments, and assessment techniques. Participants will receive a collection of existing small group projects and will create at least one new small group project during the minicourse. Familiarity with a graphics calculator will be helpful but is not a prerequisite.

MAKING LIBERAL ARTS MATHEMATICS THE MOST IMPORTANT COURSE STUDENTS TAKE TO LEARN EFFECTIVE THINKING

Edward B. Burger, Williams College
Michael Starbird, University of Texas at Austin
Part A: Friday, August 3, 1:00 pm - 3:00 pm
Part B: Saturday, August 4, 1:00 pm - 3:00 pm
Mathematics contains great ideas and powerful methods of analysis that transcend mathematics. Topics such as infinity, the fourth dimension, probability, and chaos spark everyone's imagination. These ideas are comparable to masterpieces of art, philosophy, and literature. Our challenge is to convey the genuinely deep ideas of mathematics and the important strategies of analysis and thought in a lively, fun, and enticing manner. Here participants will experience hands-on methods for bringing deep mathematical results and general techniques of thought to life for those who are not math fans.

MATHEMATICS OF DECISION MAKING

Deborah Hughes Hallett, University of Arizona
William McCallum, University of Arizona
Richard Thompson, University of Arizona
Part A: Saturday, August 4, 1:00 pm - 3:00 pm
Part B: Saturday, August 4, 4:00 pm - 6:00 pm
The course will address the question of what mathematical skills are needed by beginning undergraduates in business and management programs, and show how those needs can be met through the case study method. We will present four case studies, covering material from probability and calculus through decisions on loan foreclosure, pricing stock options, bidding on oil leases, and pricing disk drives. Each presentation will include business background, mathematical and computer tools needed, and pedagogical issues.

exhibit hall INFORMATION

Shop for new publications and products and revisit your old favorites at the MathFest 2000 Exhibit Hall. This is your opportunity to review the latest books, test innovative calculators and preview software. Meet company representatives and receive feedback that will assist you in making purchasing decisions.

In the Exhibit Hall, you will find the popular MAA Bookstore. There you can select from MAA's extensive collection of books on mathematics education, and related topics. Schedule time to browse through the new titles premiering at the MathFest 2001. Purchase books at the meeting and you'll save money with a special discount.

LOCATION

Monona Terrace Community and Convention Center
Grand Terrace – 4th Level

EXHIBIT HOURS

Thursday, August 2, 2001
9:00am-5:00pm

Friday, August 3, 2001
9:00am-5:00pm

Saturday, August 4, 2001
9:00am-3:00pm

two-day SHORT COURSE

THE LIFE AND LEGACY OF RAMANUJAN

Organized by Kenneth Ono, University of Wisconsin
Lecturers include Scott Ahlgren, Colgate University; George Andrews, Penn State University; Richard Askey, University of Wisconsin; Bruce Berndt, University of Illinois; and Ken Ono, University of Wisconsin.
Part 1: Saturday, August 4, 1:00 pm - 5:00 pm
Part 2: Sunday, August 5, 9:00 am - 5:00 pm

This course is devoted to the inspiring story of Ramanujan, and is a brief and elementary introduction to his works and legacy to number theory. The course is comprised of the following:

I. The Ramanujan Story: Presentations will include photos, excerpts of Ramanujan's letters and writings, and detailed 'oral history', by the world's leading experts on Ramanujan's life.
II. Ramanujan's Legacy in Number Theory: Presentations will focus on Ramanujan's discoveries in number theory. These will include lectures on Ramanujan's celebrated work on partitions, formal power series, and other works such as his work on the approximation of Pi.
III. Participants will be guided through proofs of some of Ramanujan's most famous discoveries. See the magic of Ramanujan revealed before your eyes!

teaching WORKSHOP

TEACHING WORKSHOP FOR GRADUATE STUDENTS AND NEW FACULTY

Thomas W. Rishel, MAA
Solomon Friedberg, Boston College
Thursday, August 2, Noon - 2:00 pm and 3:30 pm - 5:30 pm

This workshop is aimed primarily at incoming graduate students who expect to begin their first teaching duties. It would also be useful for young faculty just beginning their teaching assignments, as well as people who have been designated as trainers of graduate students and mentors of junior faculty. We will discuss the various types of TA jobs that schools offer, such as recitation instruction, paper grading, and classroom teaching. We will concentrate on such "nuts and bolts" items of teaching as where to get textbooks and syllabi, how to plan classes, how to grade quickly and accurately, and how to deal with class supervisors. We will then move onto advice on how to construct reasonable quizzes and exams, and how to decide on grading policy.

We will also use case study methodologies to discuss crisis situations that can occur, for instance, what can we do if a student cheats, or behaves bizarrely in class, or accuses us of something, etc.

student ACTIVITIES

Students and faculty will be interested in presentations of student work in sessions sponsored by the MAA and PME, and in the invited lectures developed with students in mind. Starting with a student reception on Wednesday evening, the Madison MathFest includes a rich array of activities for students. At the Student Hospitality Center – open Thursday through Saturday, 9:00 am-5:00 pm – students and other MathFest attendees can meet for informal conversation, refreshment, and mathematical diversions. The Student Hospitality Center also provides programs for the student paper sessions, packets for student presenters, and information on MathFest activities of interest to students. Special information for students can be found at MAA Online at **http://www.maa.org.**

MAA/PI MU EPSILON STUDENT RECEPTION

Wednesday, August 1, 5:30 pm - 6:30 pm

MAA AND PI MU EPSILON STUDENT PAPER SESSIONS

Thursday, August 2, 1:00 pm - 5:00 pm
Friday, August 3, 1:00 pm - 5:00 pm

GRADUATE STUDENT RECEPTION

Thursday, August 2, 5:30 pm - 6:30 pm

PME BANQUET

Friday, August 3, 6:00 pm - 7:45 pm
See the MathFest Registration Form for ticket information

PME J. SUTHERLAND FRAME LECTURE

TWICE AS OLD, AGAIN, AND OTHER FOUND PROBLEMS
Thomas F. Banchoff, Brown University
Friday, August 3, 8:00 pm - 9:00 pm

MAA STUDENT WORKSHOP

TILINGS IN HIGHER DIMENSIONS
Jeffrey Weeks, Canton, NY
Saturday, August 4, 1:00 pm - 2:50 pm

MAA STUDENT LECTURE

RANKING COLLEGE FOOTBALL TEAMS
Rhonda Hatcher, Texas Christian University
Saturday, August 4, 3:00 pm - 3:50 pm

STUDENT PROBLEM SOLVING COMPETITION

Richard Neal, University of Oklahoma
Saturday, August 4, 4:00 pm - 4:50 pm
This is the finals of the Problem Solving Competition. Universities and colleges that participate monthly on their own campuses by holding problem solving contests are invited to send two contestants. Each contestant will be required to solve a series of mathematical problems. Based upon the outcome, a champion and runner-up will be named.

MAA MATHEMATICAL CONTEST IN MODELING (MCM) WINNERS

Ben Fusaro, Florida State University
Saturday, August 4, 5:00 pm - 5:50 pm

call for MINICOURSE ORGANIZERS

CALL FOR MINICOURSE ORGANIZERS

The MAA Committee on Minicourses is soliciting proposals for new minicourses to be given at MathFest 2002 in Burlington, Vermont, August 1-3, 2002 and the Joint Mathematics Meeting in Baltimore, Maryland, January 15-18, 2003. Most minicourses are related to undergraduate curriculum, although any topic of interest to the MAA membership will be considered.

To find more information on how to submit a proposal see **<http://www.maa.org/meetings/miniguide.html>**. The deadline for submissions for the Burlington MathFest is October 1, 2001 and for the Baltimore Joint Mathematics Meeting is December 1, 2001.

call for CONTRIBUTED PAPER SESSION ORGANIZERS

CALL FOR CONTRIBUTED PAPER SESSION ORGANIZERS

The MAA Committee on Sessions of Contributed Papers selects the topics and organizers for the contributed paper sessions at MathFests and at the national meeting. The committee would be delighted to hear from MAA members who are interested in organizing sessions or who have suggestions for topics.

Planning is now underway for the MathFest in Burlington, Vermont, August 1-3, 2002, and for the AMS-MAA Joint Meeting in Baltimore, Maryland, January 15-18, 2003. The deadline for receipt of proposals from organizers for the Burlington MathFest is October 15, 2001 and for the Baltimore Joint Mathematics Meeting it is December 31, 2001. Send (preferably by e-mail) proposal title, name(s) and address(es) of the organizer(s), and a one-page summary to the chair of the committee, Howard Penn.

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U.S. Naval Academy, Annapolis, MD 21402
Phone: (410) 293-6702
Fax: (410) 293-4883

call for STUDENT PAPERS

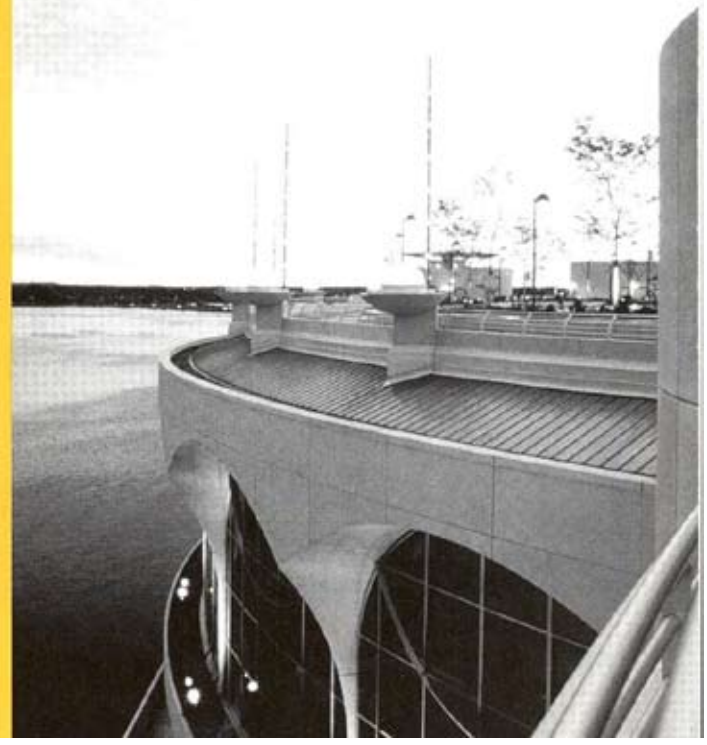
CALL FOR STUDENT PAPERS

Students who wish to present a paper at the Madison MathFest must be nominated by a faculty advisor familiar with the work to be presented. To propose a paper for presentation, the student must complete a form and obtain the signature of a faculty sponsor.

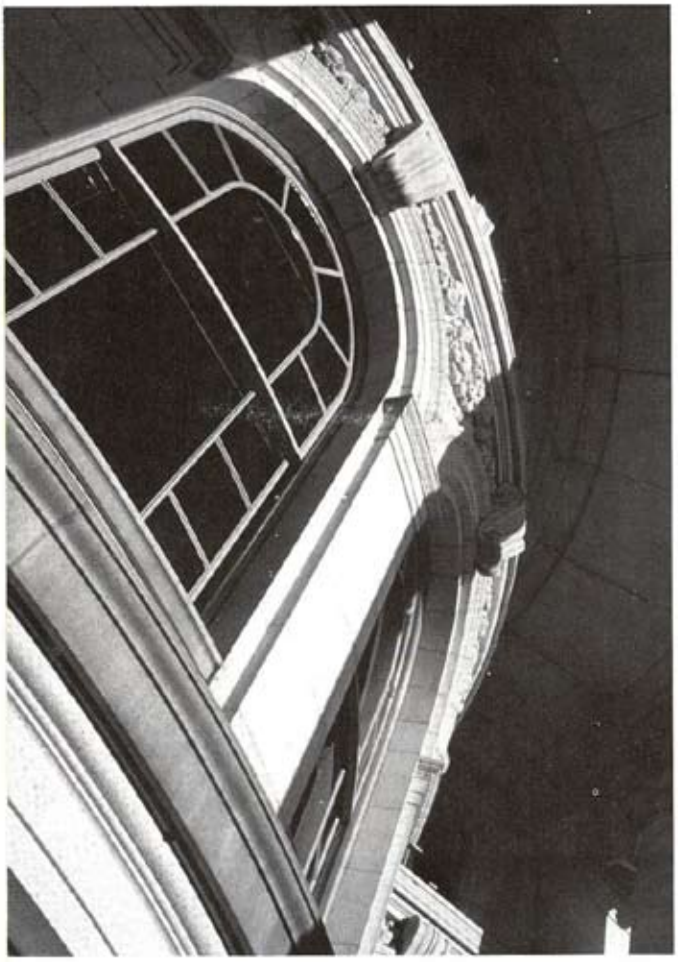
Nomination forms for the MAA Student Paper Sessions are located on MAA Online at **http://www.maa.org** under STUDENTS, or can be obtained from Dr. Charles Diminnie by e-mail at **<charles.diminnie@angelo.edu>** or by phone at (915) 942 -2317, ext. 238.

PME student speakers must be nominated by their chapter advisors. Application forms for PME student speakers can be obtained from Bob Woodside, Secretary-Treasurer of PME. He can be reached at **<mapme@ecuvm.cis.ecu.edu>**

Students who make presentations at the MathFest, and who are also members of MAA Student Chapters, are eligible for partial travel reimbursement. The deadline for receipt of applications is June 29, 2001.



tour / social events



TOUR

TALIESIN - FRANK LLOYD WRIGHT ESTATE

Wednesday, August 1, 9:00 am - 3:00 pm

A trip to Frank Lloyd Wright's estate is a memorable experience. You will be visiting the legendary hillside building. Originally designed by Wright in 1887 when he was 19, it was a progressive boarding school for students K-12. During the tour guests will discover Wright's influence on architecture in America. You will depart the Concourse Hotel at 9:00 a.m. and arrive at "Taliesin" at approximately 10:00 a.m. Visit the bookstore and/or visitor center while waiting for the tour to begin at 10:30 a.m. The tour, a combination of walking and driving will take approximately 90 minutes. At approximately noon you will board the bus and begin the return trip home.

Tickets for the tour are $28 and are available ONLY through advance registration. The bus will make a stop at a moderately priced restaurant for you to purchase lunch. (A minimum of 25 participants is required to offer this event.)

SOCIAL EVENTS

OPENING RECEPTION

Wednesday, August 1, 6:30 pm - 7:30 pm

The Association is pleased to hold a reception for all MathFest participants just prior to the Opening Banquet.

OPENING BANQUET

Wednesday, August 1, 7:30 pm - 9:30 pm

Master of Ceremonies: Edward Burger, Williams College. Continue this exciting evening by joining new and long-time friends and colleagues for a mesquite grilled chicken dinner. There will be an after-dinner presentation on "Calculated Deceptions" by S. Brent Morris. Tickets are $26 and are available through advance registration only. (Vegetarian dinner is available.)

WISCONSIN FISH BOIL

University of Wisconsin Campus
Thursday, August 2, 6:00 pm - 8:00 pm

Come and enjoy a unique Wisconsin event. A one hundred-year-old tradition of cooking fish and vegetables in a HUGE pot over an open hardwood fire continues at the University of Wisconsin. It begins at the Fishboil Picnic Grounds east of Tripp Hall on the Lakeshore Path with a cash bar at 6:00 p.m. Watch as the food is cooked over the hardwood fire, and when you hear the bell watch the show begin.....and dinner served!! (approximately 6:30 p.m.) There will be also be chicken and vegetarian selections available.

Tickets are $27 adults, $13 for children under 12. Purchasing tickets through advanced registration is recommended. Only a limited number will be available for sale onsite. Transportation to and from the University will be provided.

PME BANQUET

Friday, August 3, 6:00 pm - 7:45 pm

Tickets are $12 for PME members and their families as well as for MAA Student Chapter members and students giving talks at MAA Student Paper Sessions, and $20 for nonmembers. Purchasing tickets through advanced registration is recommended, since only a limited number of tickets will be available for sale onsite.

After the banquet, at 8:00 p.m. attend the popular PME J. Sutherland Frame lecture, given this year by Thomas Banchoff who will speak on "Twice as Old, Again, and Other Found Problems."

AWM RECEPTION

Friday, August 3, 9:00 pm - 11:00 pm

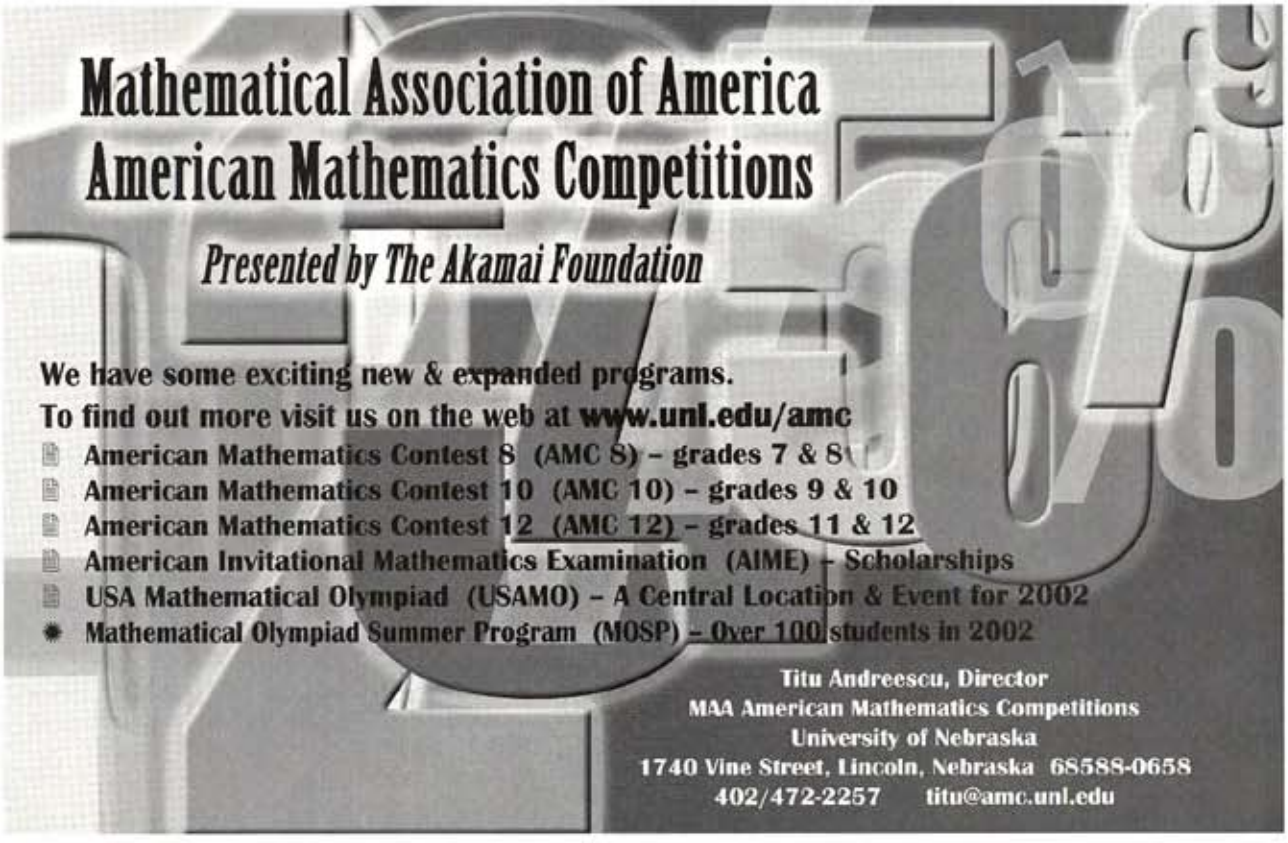
Plan to attend this cooperative party with the Association for Women in Mathematics on Friday evening at 9:00 p.m. following the Frame Lecture. All supporters of women in mathematics are encouraged to attend and to meet AWM members.

MAA 25-YEAR MEMBER BANQUET

Saturday, August 4, 2001, 6:00 pm - 9:00 pm

The 24th annual member banquet honors those individuals who have been members of the MAA for 25 years or more. The moderator will be Thomas Banchoff of Brown University. Sylvia Wiegand of the University of Nebraska at Lincoln will speak on "A Mathematical Heritage." The banquet will include a ceremony honoring Walter and Mary Ellen Rudin for their long and distinguished service to mathematics.

There will be a cash-bar reception beginning at 6:00 p.m. with the banquet following at 6:30 p.m. Dinner offers the following choices: beef, fish or vegetarian. Tickets are $30 and purchasing tickets through advanced registration is recommended, since only a limited number of tickets will be available for sale onsite.



HOW TO *register*

HOW TO REGISTER

EARLY BIRD REGISTRATION:

Register by June 15 to take advantage of the early bird savings and the option to receive your registration packet before the meeting. Registration packets will be mailed July 9.

REGULAR REGISTRATION:

Advance Registration/Hotel Forms received after June 15 and by July 11 must include payment for regular registration fees, banquet, and/or events. Participants registering during this period must pick up their registration packets at the Registration Desk. Deadline for hotel reservations is July 3, 2001. (See Hotel Section)

ONLINE REGISTRATION:

Register for the MathFest and reserve a hotel or residence hall room on the internet. Go to **http://www.maa.org** and click on "Register for MathFest 01" or go directly to "**http://www.ams.org/cgi bin/meetreg/meetings?meetnum=mf01**". Credit card payment is required for internet registration and hotel guarantees. Payment is accepted with the following credit cards only: MasterCard, Visa, American Express, and Discover.

BANQUET AND EVENTS CANCELLATIONS:

Banquet and Events cancellations must be received by July 11 to receive a 50% refund for registration. If your registration packet was mailed before you cancelled, please return your tickets to the MMSB to receive a refund.

MATHFEST CANCELLATIONS:

MathFest cancellations must be received by July 31 to receive a 50% refund for registration. If your registration packet was mailed before you cancelled, please return your badge to the MMSB to receive a refund.

MINICOURSES/SHORT COURSE REGISTRATION:

Advance Registration/Hotel Forms must be received by July 11. Enroll early; space is limited! If a course is full, you will be notified. On-site registration is allowed if enrollment permits. The MAA reserves the right to cancel courses due to low enrollment. Full refunds will be issued for cancelled courses. Otherwise, a 50% refund will be given for courses cancelled by July 31.

REGISTRATION DESK:

The Registration Desk will be located in the hallway near the Hall of Ideas, on the Fourth Level of the Monona Terrace, Convention Center. It will be open Wednesday, August 1: Noon-7:00 pm, Thursday, August 2 and Friday, August 3: 8:00 a.m.-4:00 pm, and Saturday, August 4: 8:00 am-2:00 pm. You may register onsite or pick up your registration materials, purchase bauquet and event tickets, if available at this location.

registration INFO

PAYMENT/MAILING ADDRESS

The MAA has contracted with the American Mathematical Society as its meeting planner. The Mathematics Meetings Service Bureau (MMSB) will coordinate MathFest registration and reservations at the Concourse Hotel. Please make checks payable to the MMSB. Checks drawn on foreign banks must be in equivalent foreign currency at current exchange rates. Mail/fax forms to:

Mathematics Meetings Service Bureau (MMSB)
P. O. Box 6887
Providence, RI 02940-6887
Fax: 401-455-4004

Questions/changes:
1-800-321-4267, ext. 4143 or 4144
Email: mmsb@ams.org

SHUTTLE BUS

There will be round trip shuttle service between the University of Wisconsin and the Monona Terrace Convention Center and between the Concourse Hotel and the Monona Terrace Convention Center mornings and late afternoons.

GENERAL AIRLINE INFORMATION

Airline Travel Information - There are two official airlines for MathFest 2001: Northwest Airlines and United Airlines.

NORTHWEST: To obtain a discounted fare using the WorldFile Number NY 190 call Northwest Airlines Monday through Friday at 1-800-328-1111 between the hours of 7:30 am and 7:30 pm (CT) or log on to: **http://www.nwa.com/travel/reser/**, When prompted, enter the **WorldFile Number NY190** in the box labeled "Do you have an Electronic Certificate?"

UNITED: To obtain discount fares on United Airlines make your reservations by calling 1-800-521-4041 between the hours of 7:00 am and midnight(ET). Please be sure to refer to United Airlines **Meeting Number 593XE.**

The nearest airport is the Dane County Regional Airport located in Madison approximately 8 miles from the Concourse Hotel and the University. Other nearby airports are: Mitchell International Airport in Milwaukee which is approximately 90 miles from Madison or into Chicago's O'Hare International Airport which is approximately 120 miles from Madison.

AIRPORT SHUTTLE SERVICE

One-way bus service is available from each of these airports to Madison:

Dane County Regional: The Concourse Hotel provides a free airport shuttle, which runs from 6:00 a.m.-10:30 p.m. and leaves on the hour and half-hour. Participants should pick up the courtesy hotel phone near baggage claim and dial the Madison Concourse Code that is listed on the hotel directory right next to the phone. There is a big-lighted display along with the phone. The airport is small (only 2 or 3 luggage turnstiles) so it should be very visible.

Mitchell International Airport: The cost for shuttle service is $15 and is located outside the Northwest baggage claim area, on the lower level, south end of airport. (Same area as the Milwaukee City bus stops.) Check out Badger Bus web site for additional information on times, fares and Madison drop off locations at **http://www.badgerbus.com/schedule.html** or call (608) 255-6771.

Chicago O'Hare International Airport: The cost for shuttle service is $20 from the airport to the Memorial Union at the University of Wisconsin, Madison. For more information call VanGalder Bus lines at (608) 752-5407, or (800) 747-0994 or check their website for times, fares and pickup location at **http://www.vangalderbus.com/vgschedule.html.**

PUBLIC TRANSPORTATION

Available from Dane County Reginal Airport:

Dane County Regional Airport: The Madison Metro Transit System provides bus service from the Dane County Regional Airport to the Concourse and the University. For more information telephone (608) 266-4466, TDD (608) 267-1143 or check out their website at **http://www.ci.madison.wi.us/metro/metro.html**

CAR RENTAL INFORMATION

Avis is the official car rental company for MathFest 2001. When making your reservations you must use Avis Discount Number: B159265 for the discounted meeting rate. Reservations can be made by telephone (800) 331-1600 or on line at **http://www.avis.com.**

Most of the other major car rental companies are located on the airport property. For more information on ground transportation from Dane County Airport check the airport's website at **http://www.co.dane.wi.us/airport/transpt.html.**

MathFest HOUSING

HOTEL

Reservations at the Madison Concourse must be made through the Mathematics Meetings Service Bureau (MMSB). The MMSB can process reservations and changes until 4:00 p.m. on July 3, 2001. Afterwards, reservations and changes for the Concourse Hotel can only be made directly with the hotel. The hotel may be contacted directly after July 9, 2001.

All rates are subject to a 13.5% sales/occupancy tax. Rooms will fill quickly at this property so participants are advised to reserve rooms as early as possible.

Madison Concourse Hotel & Governor's Club
4 to 5 blocks from the Monona Terrace Convention Center
One West Dayton Street
Madison, WI 53703
$114 single/double

Full service hotel, restaurant & bar, athletic facilities, indoor pool, complimentary airport shuttle, complimentary and limited round trip shuttle service to the Convention Center available in mornings and afternoons, free parking for overnight guests, physically challenged and nonsmoking rooms available

A credit card number or a check in the amount of one night stay is required to guarantee a room. Check-in: 3:00 p.m. Check-out: Noon (Late check-outs will be charged at 1/2 day rate.) All rooms include full amenities. Web-TV is available in all rooms at a cost of $9.95 per day. Computers may also be plugged into the phone line for operation.

OTHER HOTELS/MOTELS

For information on other hotels/motels in the greater Madison area, please contact the Greater Madison Convention & Visitor Bureau at **http://www.visitmadison.com** or call 1-800-373-6376.

UNIVERSITY HOUSING

UNIVERSITY OF WISCONSIN-MADISON
Division of University Housing
MathFest, August 1- 4, 2001

Reservations may now be made for accommodations in Witte Hall, a university residence hall located at 615 W. Johnson Street. Spouses and family members of MathFest participants are also welcome. Witte Hall will be open to receive guests at 12 noon Wednesday, August 1 and rooms will be available until 11:00 am Sunday, August 5.

- Most rooms in Witte Hall are designed as doubles but will be available as either doubles or singles.
- All linens, blankets, towels, and soap are furnished.
- Daily maid service is provided.
- Rooms have small refrigerators and private telephones (local and campus calls are free of charge, long distance calls can be placed using a telephone calling card or pre-paid calling card).
- All rooms are air-conditioned.
- Computer labs will be available each evening for email access.
- Rooms do not have private baths, but excellent bath facilities for men and women are located conveniently on each floor.
- Laundry facilities are available.
- Children's rooms will be located across the hall from or next to their parents' room. A limited number of cribs are available. Please indicate your needs on the attached reservation form.

A hot all-you-can-eat breakfast will be served cafeteria style in the Gordon Commons Dining Room, adjacent to Witte Hall.

Charges for the above accommodations, including breakfasts are as follows:

Single Room	$50.00 per night
Double Room	$35.00 per night per person
Children (11 years and under)	$17.50 per night per child

(There is no charge for children under 2.)

If you wish reservations in Witte Hall, please complete the attached housing form and mail it directly to Conference Services Office, University Housing, 625 Babcock Drive, Madison, WI 53706-1213. Fax (608) 262-4082. Telephone (608) 262-5576. SEND NO MONEY WITH YOUR RESERVATION. The University has requested that all payments for room and board be made upon arrival. The University accepts cash, personal or traveler's checks drawn in U.S. dollars on U.S. banks, MasterCard and VISA. Reservations will be confirmed a few weeks prior to the program. If you wish to obtain university housing through the internet, please go to **http://www.maa.org** and proceed to the "Register for MathFest 01" section.
For more information, including a campus map, please see our website at **http://www.housing.wisc.edu/summer-conferences.**

reservation FORM

RESERVATION FORM FOR ACCOMMODATIONS IN WITTE HALL
UNIVERSITY OF WISCONSIN-MADISON

MathFest 2001

AUGUST 1-4, 2001

CONFERENCE PARTICIPANT

Name

Street Address

City State Zip Code

Telephone ( ) Fax ( )

GENDER

❑ Male ❑ Female

SMOKING PREFERENCE

No smoking is allowed in the residence halls.

RESERVATION INFORMATION

❑ Single

❑ Double

Please check with named person BEFORE sending reservation. If you do not select a roommate, one will be assigned to you by the University.

Roommate

First Name Middle Initial Last Name

ADDITIONAL RESERVATIONS

❑ Double for Family

Names, Ages, Gender of Children:

❑ I will need a crib for a child ____ years old.

PARKING

❑ I will need parking for a car while staying on campus. (We will send you additional information at the time we receive your reservation. Cost is $6.00 per day.)

Arrival Date:

Departure Date:

If you have any additional reservation questions, please call us and we will be happy to work with you individually.

Please return by July 2, 2001 to:

Conference Services Office – University Housing
625 Babcock Drive, Madison, WI 53706-1213
Telephone (608)262-5576
FAX (608)262-4082
Email: sumconf@mail.housing.wisc.edu

program AT A GLANCE

THURSDAY AUGUST 2

INVITED ADDRESSES

MAA NAM DAVID BLACKWELL LECTURE LIMIT THEOREMS FOR A LARGE NETWORK IN WHICH CUSTOMERS JOIN THE SHORTEST QUEUE AMONG SEVERAL
Carl Graham, Centre de Mathématiques Appliqué (CMAP), Palaiseau, France
Thursday, August 2, 8:30 am - 9:20 am

HEDRICK LECTURE SERIES: WAVELETS IN ACTION
Ingrid Daubechies, Princeton University
Lecture 1: WAVELETS IN APPROXIMATION THEORY
Thursday, August 2: 9:30 am - 10:20 am

MAA INVITED ADDRESS
NEWTONIANISM IN ACTION
Judith Grabiner, Pitzer College
Thursday, August 2, 10:30 am - 11:20 am

SPECIAL SESSIONS

SPECIAL SESSION ON PROGRAMS FOR MINORITY STUDENTS AND MINORITY INSTITUTION FACULTY
William Hawkins, Jr., MAA and the University of the District of Columbia
Thursday, August 2, 1:00 pm - 2:20 pm

TEACHING MATHEMATICS TO LIBERAL ARTS STUDENTS
William L. Briggs, University of Colorado at Denver.
Thursday, August 2, 1:00 pm - 2:20 pm

MAA OPEN DISCUSSION ON A NEW CUPM CURRICULUM GUIDE
Harriet Pollatsek, Mount Holyoke College
Thursday, August 2, 2:30 pm - 3:50 pm

CONTRIBUTED PAPER SESSIONS

CREATIVE USE OF TECHNOLOGY IN TEACHING MATHEMATICS
Part 1: Thursday, August 2, 1:00 pm - 3:00 pm
Mary L. Platt, Salem State College
Marcelle Bouman, Jacksonville University

STRATEGIES FOR IMPLEMENTING RECOMMENDATIONS IN THE MATHEMATICAL EDUCATION OF TEACHERS (MET)DOCUMENT
Part 1: Thursday, August 2, 1:00 pm - 3:00 pm
Judith Covington, Louisiana State University - Shreveport
Marjorie Enneking, Portland State University

GENERAL CONTRIBUTED PAPER SESSION
Part 1: Thursday, August 2, 1:00 pm - 5:00 pm
Susan E. Kelly, University of Wisconsin - La Crosse

THE USE OF HISTORY IN THE TEACHING OF MATHEMATICS
Thursday, August 2, 2:30 p.m. - 4:30 p.m.
Dick Jardine, Keene State College
Amy Shell, U.S. Military Academy

DEPARTMENTAL STRATEGIES FOR TRAINING FACULTY TO USE TECHNOLOGY
Thursday, August 2, 3:15 p.m. - 5:15 pm.
Kirk E. Willet, Bethel College
Janet Andersen, Hope College

INNOVATIVE METHODS IN COURSES BEYOND CALCULUS
Thursday, August 2, 3:15 p.m. - 5:15 p.m.
Richard J. Maher, Loyola University Chicago

FRIDAY AUGUST 3

INVITED ADDRESSES

MAA INVITED ADDRESS
PROOF OF THE DOUBLE BUBBLE CONJECTURE
Frank Morgan, Williams College
Friday, August 3, 8:30 am - 9:20 am

HEDRICK LECTURE SERIES
Lecture 2: WAVELETS AND SIGNAL COMPRESSION
Friday, August 3: 9:30 am - 10:20 am

JAMES R.C. LEITZEL LECTURE
WHAT I HAVE LEARNED FROM THE MATHEMATICS COMMUNITY
Robert E. Witte, Exxon Mobil Foundation
Friday, August 3, 10:30 am - 11:20 am

PI MU EPSILON J. SUTHERLAND FRAME LECTURE TWICE AS OLD, AGAIN, AND OTHER FOUND PROBLEMS
Thomas F. Banchoff, Brown University
Friday, August 3, 8:00 pm - 9:00 pm

SPECIAL SESSIONS

GRANT WRITING: EVERYTHING THAT YOU HAVE ALWAYS WANTED TO KNOW ABOUT THE GRANT WRITING PROCESS FROM THOSE WHO HAVE BEEN AWARDED FUNDING
Friday, August 3, 1:00 pm - 2:20 pm
Sarah Mabrouk, Framingham State College

SPECIAL SESSION ON EXPANDING THE VISION: INCREASING THE PARTICIPATION OF WOMEN IN MATHEMATICS
Virginia Gilchrist Kasten, General Motors
Kathleen Sullivan, Seattle University
Elizabeth Yanik, Emporia State University
Friday, August 3, 1:00 pm - 2:50 pm

INVITED PAPER SESSION ON SOAP BUBBLE GEOMETRY
Friday, August 3, 3:00 pm - 6:00 pm
Frank Morgan, Williams College

CONTRIBUTED PAPER SESSIONS

CREATIVE USE OF TECHNOLOGY IN TEACHING MATHEMATICS
Part 2: Friday, August 3, 1:00 pm - 3:00 pm

STRATEGIES FOR IMPLEMENTING RECOMMENDATIONS IN THE MATHEMATICAL EDUCATION OF TEACHERS (MET) DOCUMENT
Part 2: Friday, August 3, 1:00 pm - 3:00 pm

GENERAL CONTRIBUTED PAPER SESSION
Part 2: Friday, August 3, 1:00 pm - 5:00 pm

ARUME: HOW MATHEMATICS EDUCATION RESEARCH CAN INFORM TEACHING
Part 1: Friday, August 3, 2:30 pm - 4:30 pm
Julie M. Clark, Emory & Henry College
Bernadette Baker, Drake University
Pam Crawford, Jacksonville University

INNOVATIVE PROGRAMS TO IMPROVE THE TEACHING OF MATHEMATICS
Friday, August 3, 3:15 pm - 5:15 pm
Aaron K. Traurwein, Carthage College
Eric Rawdon, Chatham College

SMOOTHING MATHEMATICAL TRANSITIONS: ARTICULATION EFFORTS BETWEEN INSTITUTIONS
Part 1: Friday, August 3, 3:15 pm - 5:15 pm
Bernard L. Madison, University of Arkansas
Sheldon Gordon, SUNY at Farmingdale

SATURDAY AUGUST 4

INVITED ADDRESSES

AWM-MAA INVITED ADDRESS: THE SCHOLARSHIP OF LEARNING AND TEACHING: A LOOK BACK AND A LOOK AHEAD
Patricia Shure, University of Michigan
Saturday, August 4, 8:30 am - 9:20 am

HEDRICK LECTURE SERIES
Lecture 3: WAVELETS AND SUBDIVISION
Saturday, August 4: 9:30 am - 10:20 am

MAA INVITED ADDRESS: THE OTHER LESSONS: WHAT STUDENTS KEEP FOR LIFE
Michael Starbird, University of Texas at Austin
Saturday, August 3, 10:30 am - 11:20 am

MAA STUDENT WORKSHOP: TILINGS IN HIGHER DIMENSIONS
Jeffrey Weeks, Canton, NY
Saturday, August 4, 1:00 pm - 2:50 pm

MAA STUDENT LECTURE
RANKING COLLEGE FOOTBALL TEAMS
Rhonda Hatcher, Texas Christian University
Saturday, August 4, 3:00 pm - 3:50 pm

SPECIAL SESSIONS

CAN APPLICATIONS BE USED AS THE BASIS FOR A DEVELOPMENTAL MATHEMATICS PROGRAM?
Solomon Garfunkel, COMAP
Susan Forman, Bronx Community College (CUNY)
Saturday, August 4, 1:00 pm - 2:20 pm

BUILDING REGIONAL CAPACITY
Saturday, August 4, 1:00 pm - 2:20 pm
Nancy M. Antonellis and Steve Benson
Center for Mathematics Education, Newton, MA

UNIVERSITY ACTUARIAL SCIENCE PROGRAMS: THE HOW-TO
Michael M. Braunstein, ACTEX Publications, Winsted, CT
Saturday, August 4, 1:00 pm - 2:20 pm

CREATING AND SUSTAINING NExT-LIKE PROJECTS IN MAA SECTIONS
Gavin LaRose, University of Michigan
Joe Gallian, University of Minnesota, Duluth
Saturday, August 4, 3:00 pm - 4:50 pm

SPECIAL SESSION ON THE STATUS OF INTERACTIVE MATHEMATICS TEXTS
Elias Deeba, University of Houston
Downtown: Dan Kalman, American University: James White, Director, Project WELCOME
Saturday, August 4, 3:00 pm - 6:00 pm

CONTRIBUTED PAPER SESSIONS

SMOOTHING MATHEMATICAL TRANSITIONS: ARTICULATION EFFORTS BETWEEN INSTITUTIONS
Part 2: Saturday, August 4, 1:00 pm - 3:00 pm

ARUME: HOW MATHEMATICS EDUCATION RESEARCH CAN INFORM TEACHING
Part 2: Saturday, August 4, 3:00 pm - 5:00 pm

TECHNOLOGY BASED MODELING IN MATHEMATICS COURSES
Saturday, August 4, 3:15 pm - 5:15 pm
Rebecca E. Hill, Rochester Institute of Technology
Howard Lewis Penn, U.S. Naval Academy

MAKING GENERAL MATHEMATICS AND PRECALCULUS COURSES OF SERVICE TO MATHEMATICS
Saturday, August 4, 3:15 pm - 5:15 pm
Sarah L. Mabrouk, Framingham State College

MINICOURSES

WEDNESDAY AUGUST 1

TEACHING INTRODUCTORY STATISTICS USING A WORKSHOP APPROACH
Part A: Thursday, August 2, 1:00 pm - 5:00 pm
James H. Albert, Bowling Green State University

CWATSETS: A RESEARCH EXPERIENCE FOR UNDERGRADUATES
Part A: Thursday, August 2, 1:00 pm - 5:00 pm
Gary J. Sherman, Rose-Hulman Institute of Technology

AN INTRODUCTION TO MATHEMATICAL CARD TRICKS
Part A: Thursday, August 2, 3:15 pm - 5:15 pm
Colm Mulcahy, Spelman College

CONTEMPORARY COLLEGE ALGEBRA: A REFORMED COLLEGE ALGEBRA COURSE
Part A: Thursday, August 2, 3:15 pm - 5:15 pm
Donald Small, US Military Academy
Dorothy Hunter, Huston-Tillotson College
Laurette Foster, Prairie View A&M University

THURSDAY AUGUST 2

FRIDAY AUGUST 3

MAKING LIBERAL ARTS MATHEMATICS THE MOST IMPORTANT COURSE STUDENTS TAKE TO LEARN EFFECTIVE THINKING
Part A: Friday, August 3, 1:00 pm - 3:00 pm
Edward B. Burger, Williams College
Michael Starbird, University of Texas at Austin

CWATSETS: A RESEARCH EXPERIENCE FOR UNDERGRADUATES
Part B: Friday, August 3, 1:00 pm - 3:00 pm

TEACHING INTRODUCTORY STATISTICS USING A WORKSHOP APPROACH
Part B: Friday, August 3, 3:15 pm - 5:15 pm

CONTEMPORARY COLLEGE ALGEBRA: ARE FORMED COLLEGE ALGEBRA COURSE
Part B: Friday, August 3, 3:15 pm - 5:15 pm

SATURDAY AUGUST 4

MAKING LIBERAL ARTS MATHEMATICS THE MOST IMPORTANT COURSE STUDENTS TAKE TO LEARN EFFECTIVE THINKING
Part B: Saturday, August 4, 1:00 pm - 3:00 pm

AN INTRODUCTION TO MATHEMATICAL CARD TRICKS
Part B: Saturday, August 4, 3:15 pm - 5:15 pm

MATHEMATICS OF DECISION MAKING
Part A: Saturday, August 4, 1:00 pm - 3:00 pm
Part B: Saturday, August 4, 4:00 pm - 6:00 pm
Deborah Hughes Hallett, University of Arizona
William McCallum, University of Arizona
Richard Thompson, University of Arizona

SUNDAY AUGUST 5

STUDENT ACTIVITIES

WEDNESDAY AUGUST 1

MAA AND PI MU EPSILON STUDENT RECEPTION
Wednesday, August 1, 5:30 pm - 6:30 pm

THURSDAY AUGUST 2

MAA AND PI MU EPSILON STUDENT PAPERS SESSIONS
Thursday, August 2, 1:00 pm - 5:00 pm

GRADUATE STUDENT RECEPTION
Thursday, August 2, 5:30 pm - 6:30 pm

FRIDAY AUGUST 3

MAA AND PI MU EPSILON STUDENT PAPERS SESSIONS
Friday, August 3, 1:00 pm - 5:00 pm

PME BANQUET
Friday, August 3, 6:15 pm - 7:45 pm
See the MathFest Registration Form for ticket information

PME J. SUTHERLAND FRAME LECTURE
TWICE AS OLD, AGAIN, AND OTHER FOUND PROBLEMS
Thomas F. Banchoff, Brown University
Friday, August 3, 8:00 pm - 9:00 pm

SATURDAY AUGUST 4

MAA Student Workshop TILINGS IN HIGHER DIMENSIONS
Jeffrey Weeks, Canton, NY
Saturday, August 4, 1:00 pm - 2:50 pm

MAA Student Lecture: RANKING COLLEGE FOOTBALL TEAMS
Rhonda Hatcher, Texas Christian University
Saturday, August 4, 3:00 pm - 3:50 pm

STUDENT PROBLEM SOLVING COMPETITION
Richard Neal, University of Oklahoma
Saturday, August 4, 4:00 pm - 4:50 pm

MAA MATHEMATICAL CONTEST IN MODELING (MCM) WINNERS
Ben Fusaro, Florida State University
Saturday, August 4, 5:00 pm - 5:50 pm

SUNDAY AUGUST 5

GENERAL ACTIVITIES

WEDNESDAY AUGUST 1

TOUR
TALIESIN - FRANK LLOYD WRIGHT ESTATE
Wednesday, August 1, 9:00 am – 3:00 pm

OPENING RECEPTION
Wednesday, August 1, 6:15 pm - 7:30 pm

OPENING BANQUET
Wednesday, August 1, 7:30 pm - 9:30 pm

THURSDAY AUGUST 2

TEACHING WORKSHOP
TEACHING WORKSHOP FOR GRADUATE STUDENTS AND NEW FACULTY
Thomas W. Rishel, MAA
Solomon Friedberg, Boston College
Thursday, August 2,
Noon - 2:00 pm and 3:30 pm - 5:30 pm

WISCONSIN FISH BOIL
University of Wisconsin Campus
Thursday, August 2, 6:00 pm - 8:00pm

FRIDAY AUGUST 3

PME BANQUET
Friday, August 3, 6:00 pm - 7:45 pm

AWM BANQUET
Friday, August 3, 9:00pm - 11:00 pm

SATURDAY AUGUST 4

THE 2-DAY SHORT COURSE
THE LIFE AND LEGACY OF RAMANUJAN
Part 1: Saturday, August 4, 1:00 pm - 5:00 pm
Part 2: Sunday, August 5, 9:00 am - 5:00 pm
Organized by Kenneth Ono, University of Wisconsin
Lecturers include Scott Ahlgren, Colgate University; George Andrews, Penn State University; Richard Askey, University of Wisconsin; Bruce Berndt, University of Illinois; and Ken Ono, University of Wisconsin.

MAA 25-YEAR MEMBER BANQUET
Saturday, August 4, 6:00 pm - 9:00 pm

SUNDAY AUGUST 5

THE 2-DAY SHORT COURSE
THE LIFE AND LEGACY OF RAMANUJAN
Part 2: Sunday, August 5, 9:00 am - 5:00 pm

directions

TRAVELING BY CAR

GETTING TO MADISON:

Madison is located in south central Wisconsin and is accessible via several major highways. Madison is a:

- 1 1/2 hour drive from Milwaukee (via Interstate 94)
- 2 1/2 hour drive from Chicago (via Interstate 90)
- 4 1/2 hour drive from Minneapolis/St. Paul (via Interstate 94)
- 2 hour drive from Dubuque (via US 151)

GETTING TO UW-MADISON:

- Take I-90 or US 151 to Hwy 12/18
- Follow Hwy 12/18 exit at Park Street (Exit 261 B)
- Proceed north on Park Street about four miles to Johnson Street and turn right on Johnson Street. (See detail map.)
- Proceed one block to Lake Street and turn left on Lake Street.
- Two public parking ramps that charge by the hour are available on Lake Street and are within a five-minute walk to campus.

employment OPPORTUNITIES

PENNSYLVANIA MATHEMATICS POSITION

ROSEMONT COLLEGE

Rosemont College in Suburban Philadelphia is accepting applications for a full-time non-tenured track position in Mathematics at the level of Assistant Professor. Prefer Ph.D. in Mathematics or pending. Will teach a variety of Mathematics courses. Include curriculum vita, graduate transcripts, three recommendations. Salary range $28,000 - $30,000.

Send application to Dr. Ann Randolph, Rosemont College, Rosemont, PA 19010. 610-527-0200, x2374, randolph@rosemont.edu.

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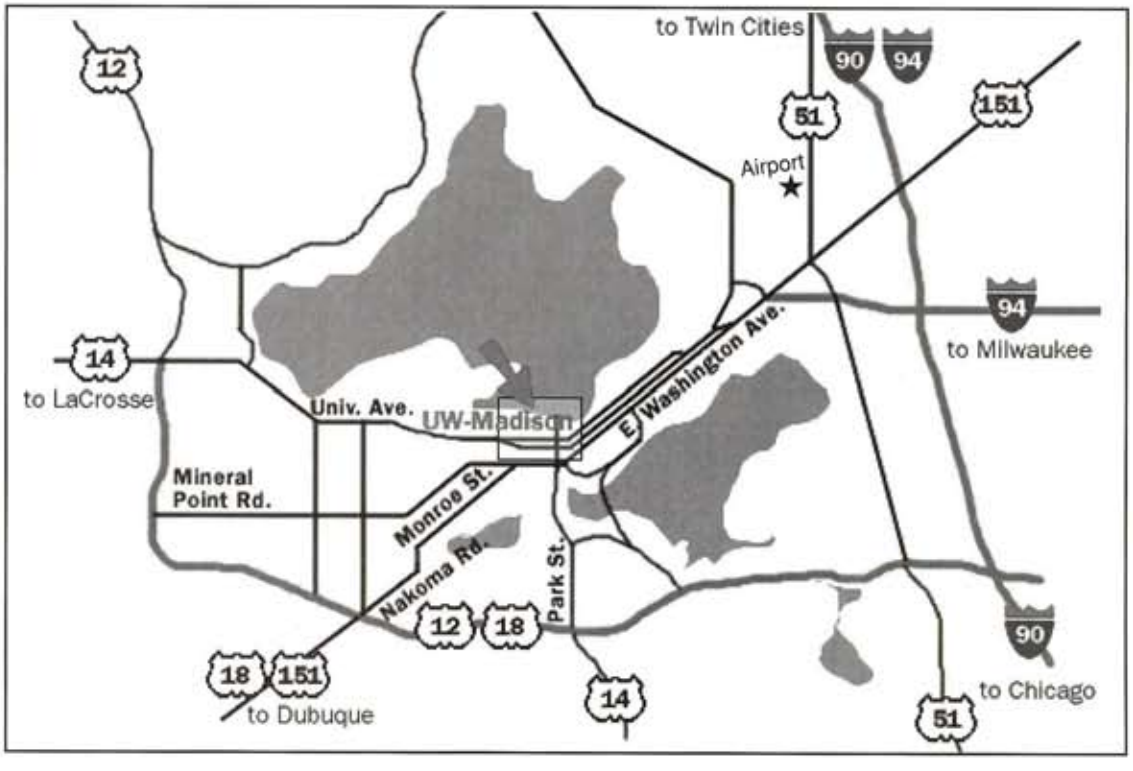

Employment Opportunities

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