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### From the Chair:

**Ilene Morgan, University of Missouri-Rolla**

The University of Missouri-Rolla is looking forward to hosting the Missouri Section Meeting of the MAA on Friday and Saturday, April 6 and 7, 2001 in Rolla, Missouri. We have a wide variety of talks and presentations on both Friday and Saturday, including a number of student presentations. All of the activities will take place in McNutt Hall and University Center-East (see the schedule for details).

Our invited speakers are David Stone of Georgia Southern University and Joe Gallian of the University of Minnesota-Duluth. Professor Gallian's talk, which will be presented on Friday afternoon, is entitled "Breaking Drivers' License Codes." Professor Stone's talk, entitled "Lotteries --Bad Odds, Good Problems," will be presented on Saturday morning.

Also, Ed Spitznagel, the 2000 recipient of the MAA Missouri Section Distinguished Teaching Award, will be continuing the tradition of the last two years by serving as the banquet speaker on Friday evening.

We are pleased to announce that there will be a Grant Writing Workshop held Friday morning concurrently with the second session of the Math Contest. More details and registration information are provided later in this Newsletter.

Please see the section web page at <http://momaa.math.umr.edu/> for registration information, maps of Rolla and the UMR campus, and driving directions. The registration form for the Spring meeting can be found on the MAA Missouri Section homepage at [http://momaa.math.umr.edu/forms/registration\\_form.html](http://momaa.math.umr.edu/forms/registration_form.html). We would like to remind you that students are not required to pay a registration fee for the meeting and can also pay a reduced amount to attend the banquet; we hope that this will make it possible for many students to participate. (Students are encouraged to submit registration forms to help us estimate the number of participants.) We anticipate that the Section Meeting will be a rewarding experience for faculty and students alike and we look forward to your participation.

**Editor's Note:** I apologize that I tried to speed up time and print the Fall 2001 Newsletter in Fall 2000 as the front cover of that issue indicated, but I think I have figured out the right time for this edition. Thanks to all of you who have submitted items to be included in the Spring 2001 Newsletter. Unfortunately, I am unable to include news from campuses this time, but I will save the information forwarded to me to be listed in the actual Fall 2001 newsletter.

# Spring Meeting of the Missouri Section of the MAA

University of Missouri-Rolla

McN=McNutt Hall, UCE=University Center-East

## Friday, April 6, 2001

8:30 AM-11:00 AM	Grant Writing Workshop, UCE (exact room will be posted at site)
11:00 AM-4:00 PM	Registration, McN Commons (near room 204)
1:00-2:50 PM	Displays and Exhibits, MAA book sale, McN 212
1:00-2:35 PM	Concurrent Sessions, McN 216 and 243 (See pages (??) for details)
2:35-3:00 PM	Break
3:00-3:10 PM	Welcome, Russell Buhite, Dean, UMR College of Arts and Sciences, McN 204
3:10-4:10 PM	MAA Polya Lecture, "Breaking Drivers' License Codes," Joe Gallian, University of Minnesota-Duluth, McN 204
4:20-5:15 PM	Concurrent Sessions, McN 204, 216, 243
5:20-6:20 PM	Meeting for New and Non-Tenured Faculty, McN (room TBA)
6:30-8:30 PM	Banquet, UCE Cafeteria. Professor Ed Spitznagel of Washington University in St. Louis will be the Banquet Speaker.
8:30-9:30 PM	Executive Committee Meeting, UCE Cafeteria

## Saturday, April 7, 2001

6:15-7:00 AM	5K Run/Walk, start/finish at BerJuan Park
7:30-8:30 AM	Breakfast meetings of Department Chairs and MAA Liaisons, UCE Missouri Room
7:30-8:30 AM	Breakfast meeting for New and Non-Tenured Faculty, UCE (room TBA)
8:40-10:00 AM	Registration, McN Commons
8:40-10:00 AM	Displays and Exhibits, MAA book sale, McN 212
8:40-9:35 AM	Concurrent Sessions, McN 204, 211, 216
9:35-10:00 AM	Break
10:00-11:00	AM MAA Invited Address, "Lotteries -- Bad Odds, Good Problems," David Stone, Chair of the MAA Committee on Sections, McN 204
11:00 AM-noon	Business Meeting, McN 204

## Parking

A parking map is available at [http://www.UMR.edu/~police/parking/images/campus\\_map.jpg](http://www.UMR.edu/~police/parking/images/campus_map.jpg) (there is also a link from the "Driving Directions" heading at the Section web site). Parking is permitted in all lots (unless specific parking spots are marked otherwise) after 4:30 PM on weekdays and all day on weekends. For Friday during the day, we have been assigned parking in Visitors' Lot 21, adjacent to University Center-East, and Red Lot 26, about two blocks south of McNutt Hall. Permits for Friday cost \$1.00 and will be good for both of those lots. If you request and pay for a parking permit with your preregistration, we will mail your permit to you. We will also have permits available Thursday night before the Math Contest, Friday morning before the Math Contest and Grant Writing Workshop, and at the registration desk.

# COLLEGIATE MATHEMATICS COMPETITION

The sixth Missouri MAA Collegiate Mathematics Competition will be held Thursday, April 5, 2001 and Friday, April 6, 2001 on the campus of the University of Missouri-Rolla in Rolla, Missouri. Any college or university in the state of Missouri can send up to two official teams of 1-3 undergraduates each to compete in the competition. Unofficial teams will be allowed to compete, depending on the amount of available space, but will not be eligible for awards. They will also be charged the normal registration fee. A one-person team will only be allowed in the competition if this person is his or her college's only representative in the competition. A completed registration form for each team must be sent one week before the competition begins. Late registration will be accepted only if there is room for the team in the competition. No calculators or computers or reference material can be used during the competition. The contest will consist of challenging mathematical problems, comparable but not quite as difficult as the Putnam Exam. The Putnam Exam is a national exam sponsored by the MAA and given to outstanding college mathematics students. Previous Putnam Exams can be found in past October issues of the American Mathematical Monthly.

The first session will begin on Thursday, April 5 at 7:30 pm and last until 10 pm and will consist of 5 problems for each team to solve. The second session will begin on Friday, April 6 at 8:30 am and will end at 11 am. It will also contain an additional 5 problems. Each problem will be worth 10 points and will be scored by a committee of the MAA Missouri section. The committee consists of the following members: Mangho Ahuja (SEMSU), Jim Bruening (SEMSU), Hang Chen (CMSU), Curtis Cooper (CMSU), Joseph B. Dence (UMSL), Leon Hall (UMR), and Alvin Tinsley (CMSU). Some partial credit may be earned for substantially correct work toward a solution to the problem.

There will be a registration fee of \$25 per team. A complementary continental breakfast will precede the Friday morning competition. Each team member and the faculty sponsor are invited to a Friday pizza party at 11:30 am. Each team member is also invited to be a guest at the MAA Missouri Section Banquet on Friday night. At that time, the results of the competition will be announced. A traveling trophy will be awarded to the first place team. In addition, each member of the first place team will receive a plaque. Certificates will also be given to each participant in the competition.

The registration form for the competition can be found on the MAA Missouri Section homepage at [http://momaa.math.umr.edu/forms/contest\\_registration\\_form.html](http://momaa.math.umr.edu/forms/contest_registration_form.html).

Any questions about the competition can be sent to

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**Spring Meeting of the Missouri Section of the MAA  
University of Missouri-Rolla  
Concurrent Sessions**

**Friday, April 6, 2001**

<b>Times</b>	<b>Session I</b>	<b>Session II</b>	<b>Session III</b>
1:00-1:15	<b>Sylow's Proof of Sylow's Theorem</b> Lucille Marshall, UMR (student)	<b>Divergent RATS Sequences</b> Curtis Cooper, CMSU	
1:20 - 1:35	<b>The Probability of Randomly Generating a Finite Group</b> Kimberly Patti, Saint Louis University (student)	<b>A Trick of the Trade for Simplex Standard Minimization</b> Scott Garten, NWMSU	
1:40 - 1:55	<b>Integers of the Form <math>p^2 - q^2</math>, with <math>p, q</math> primes</b> Norman Elliott, CMSU (student)	<b>How Nicolai and Janos came to the Ozarks</b> Leon Hall, UMR	
2:00-2:15	<b>Asymptotic Symmetry of Polynomials</b> Paul Deiermann, SEMO	<b>Map Equations for Trochoids</b> Sibel Pasali, UMR (student)	
2:20-2:35	<b>Zeros of Social Security Number Polynomials</b> Tim Ray, SEMO	<b>Hyperbolic Billiard Paths</b> Chad White, UMR (student)	
4:20-4:35	<b>A Design for an Undergraduate, Capstone Seminar in the History of Mathematics</b> Charlie Smith, Park University	<b>The Binomial Asset Pricing Model</b> Anthony Anston College of the Ozarks (student)	
4:40 - 4:55	<b>How Do Students Best Learn Calculus?</b> Carol Browning Drury University	<b>Parameter Estimation in Linear Models with Variances Subject to Order Restriction</b> Carol Hoferkamp, Truman State University	
5:00 –5:15	<b>A Profile of Today's Students from the Students' Point of View</b> Susan Callahan, Cottey College	<b>Colored Brackets and 2-manifolds</b> David Richter, SEMO	<b>Incorporating the "Principles and Standards for School Mathematics" in Teacher Training Courses</b> (MAT) <sup>2</sup> panel chaired by Linda Plymate, SMSU

Saturday, April 07, 2001

8:40 – 8:55	<b>Iterative Procedures: Stability Versus Convergence with Errors</b> Troy Hicks, UMR	<b>A Generalization of the Birthday Problem</b> James Guffey, Truman State University	<b>“Illustrate the Point:” Activities in Algebra Using TI-89 Calculators</b> Linda Plymate, SMSU (presentation will take approximately 45 minutes)
9:00 - 9:15	<b>Application of Temporal Logic</b> Murat Atmaca, UMR (student)	<b>Problems Involving Election Recounting</b> Laura Trump, Truman State University (student)	
9:20 – 9:35	<b>A Note on the Cantor Set</b> Ken Lee, Missouri Western State College	<b>Recent Topics in Mathematical Biology</b> Pam Reich, Truman State University	

## Announcement: Grant Writing Workshop

The MAA has received funding from the NSF Division of Undergraduate Education for MAA sections to hold Grant Writing Workshops. The purpose of these workshops is to make mathematicians more aware of federal funding opportunities and to guide potential grant seekers in the art of writing effective and fundable grants.

We are pleased to announce that the Missouri Section will hold a workshop presented by Prof. Ray Collings of Georgia Perimeter College at the 2001 section meeting to be held at the University of Missouri-Rolla. The workshop will be held Friday morning, April 6, 2001, from 8:30 to 11:00 am. This timing should be convenient for those of you who are accompanying teams participating in the Collegiate Mathematics Competition.

The registration fee of \$10 includes materials for participants. Preregistration is required to make sure we have the correct number of handouts.

The registration form is available at [http://momaa.math.umar.edu/2001\\_Meeting/GrantWkshp.html](http://momaa.math.umar.edu/2001_Meeting/GrantWkshp.html). If you have any questions, please call or write Dr. Ilene Morgan, (573) 341-4652, [imorgan@umar.edu](mailto:imorgan@umar.edu).

## **MEETING FOR NEW AND NON-TENURED FACULTY IN THE MATHEMATICAL SCIENCES**

All new (first 6 years of teaching) and non-tenured, mathematical sciences faculty in the Missouri Section of the MAA are invited to attend a panel discussion on Friday, April 6, from 5:20 -6:20 p.m. to discuss implementing a Section NExT (New Experiences in Teaching) program in the Missouri Section. The Section NExT would address issues of concern to new faculty and create a cohort of new Missouri mathematics faculty to share ideas about teaching and learning mathematics.

In addition, a FREE breakfast meeting will be held Saturday, April 7, 7:30 - 8:30 a.m. to continue the discussion.

Project NExT (New Experiences in Teaching) is a national program (sponsored by the MAA with support from the Exxon Foundation) for new faculty in the mathematical sciences who are interested in improving the teaching and learning of undergraduate mathematics. Activities for Project NExT fellows take place at (or immediately prior to) national MAA meetings.

The MAA Strategic Plan in Action encourages the development of Project NExT-like experiences in the various MAA Sections. While the national Project NExT program has included over 300 faculty in almost all of the 29 MAA Sections, there are still many other faculty new to the profession who have been unable to participate. Section-based NExT-like programs can therefore fill this gap by providing activities fostering the professional development and support of new faculty in the MAA Sections.

A Project NExT-like program is being organized for the Missouri MAA Section. The first activities have been scheduled to occur during (but not conflicting with) the Missouri Sectional Meeting of the MAA on April 6th and 7th. Activities will include two meetings for all interested, new and non-tenured faculty:

1. Friday, 5:20 pm - 6:20 pm: An opening panel discussion - The panelists will include Project NExT Fellows in the Missouri Section who will describe NExT activities and share some ways in which NExT has contributed to their professional lives. The panel will then lead a discussion among the whole group about the formation of a Project NExT-like program for the Missouri Section, drawing on the national Project NExT program and other section NExT programs as models.
2. Saturday, 7:30 - 8:30 am: A breakfast meeting in which additional topics of concern to new faculty and questions from the panel discussion on Friday will be addressed, and selected organizational details can be finalized. A FREE breakfast will be served during this meeting.

For more information, please e-mail Dr. Kim McHale at [kpmchale@email.ccis.edu](mailto:kpmchale@email.ccis.edu).

# Motel Information

## Missouri Section MAA Meeting, Rolla

### April 5-7, 2001

We have reserved blocks of rooms at the following three motels. All three are AAA 3-diamond establishments. To get the rates quoted, mention the MAA Mathematics Meeting. The "box letters" refer to the online map of Rolla.

Drury Inn: (At I-44 (Exit 186) and US 63 intersection, box A on the map) Phone 573-364-4000. \$46.99 plus tax per night for 1-4 people. Reserve by March 22.

Howard Johnson: (Near I-44 Exit 184, box H on the map) Phone 573-364-7111. \$45.99 single or \$49.00 double per night plus tax. Reserve by March 26. (Asked us to say they have the largest rooms and largest swimming pool in Rolla)

Best Western Coachlight Inn: (Near I-44 Exit 184, box I on the map) Phone 573-341-2511. \$39.00 plus tax per night, single or double. Reserve by March 28.

Although we did not reserve rooms at the following motels, they are reasonable places to stay, and are listed for your information.

Hampton Inn: (At I-44 (Exit 186) and US 63 intersection, box Q on the map) Phone 573-308-1060. \$66 single, \$76 double per night plus tax.

Holiday Inn Express: (1507 Martin Springs Drive, the south outer road from I-44 Exit 184, box L on the map) Phone 573-364-8200. \$69.50 per night plus tax, single or double.

Super 8 Motel: (1201 Kingshighway, east of I-44 Exit 184, box F on the map) Phone 573-364-4156. \$39.88 single, \$48.88 double per night plus tax (lower if you have a Super 8 VIP Discount Card).

Zeno's Motel: (1621 Martin Springs Drive, the south outer road from I-44 Exit 184, box N on the map) Phone 573-364-1301. \$56.00-\$59.00 per night plus tax, single or double, depending on room type.

## From the Governor:

Vic Gummersheimer, S.E.Mo.St.U.

The Board of Governors met on January 9, 2001, from 9:00 a.m. to 5:00 p.m. during the Joint Mathematics Meetings in New Orleans. **Outgoing President Tom Banchoff** did an excellent job of keeping the agenda on schedule. The Board of Governors expressed its gratitude for his skill and willingness to serve as an ambassador for mathematics during the last two years. Tom will continue to be a member of the Board as Past President. You may recall that President Banchoff attended our Section meeting in Kansas City at Rockhurst College on April 10, 1999.

The **new President Ann Watkins** of UCLA will chair the next Board of Governors meeting on August 1 in Madison, Wisconsin, during Mathfest 2001. The next Joint Mathematics Meetings will be held January 6 to 9, 2002, in San Diego, CA.

Since the MAA no longer actively supports the Placement Test program, the Board approved the dissolution of the Committee on Testing and the formation of a new standing committee, **Committee on Articulation and Placement**. The committee is charged with studying articulation issues in the mathematics curriculum affecting students who move from high school to college and from two-year colleges to four-year colleges. It will also study mathematics placement practices and make recommendations about the use of placement tests.

The name of the Committee on Student Chapters was changed to the **Committee on Undergraduate Student Activities and Chapters** to reflect the range of activities considered by this committee. The charge of the committee is to encourage and assist colleges and universities in fostering MAA student chapters and to arrange educational and social opportunities and activities at national and section meetings for undergraduates interested in the mathematical sciences.

Kenneth A. Ross was appointed chair of the new **Committee on Elections** to study the timing and method of conducting national MAA elections. One of their major objectives will be to increase the number of people who participate in MAA elections.

The Board of Governors approved a 3-page **Conflict of Financial Interest Policy** for members of the Board, Volunteers, and staff. A Volunteer is defined to include any person, other than a member of the Board of Governors, who serves as officer, editor, committee member, or section officer of the Organization, and any principal investigator on a grant or contract administered by the Organization. The Policy is available on the MAA web site [www.maa.org](http://www.maa.org).

Barbara Faires has resigned from the **Audit and Budget Committees**. James Daniel, senior member of the Audit Committee, will chair both the Audit and Budget Committees with Barbara's departure. She has made significant contributions to these two committees during the last ten years.

The Board approved a **3.5% increase in the membership rates for 2002**. For example, a regular member receiving *The Monthly* will now pay \$149 instead of \$144, a \$5 increase. The largest increases were in the Life Memberships moving from \$1200 to \$1500. Projected budgets for 2002 and beyond necessitated the increases.

The proposed revisions in the **Wisconsin Section Bylaws** were approved.

The **Task-Force on Graduate Student Membership**, chaired by Frank Morgan, has prepared a letter to be sent to department chairs in September promoting graduate student memberships. The letter lists eight reasons to join the MAA and offers a year's membership including one journal or *Math Horizons* for \$20. The Task-Force will continue and evaluation the option of creating a standing committee in this area.

Two special interest groups, SIGMAAs, have been active within the MAA. They are the SIGMAA on Research in Undergraduate Mathematics Education (formerly ARUME) and the SIGMAA on Statistics Education. The Board of Governors approved the formation of a third SIGMAA: the SIGMAA on mathematics in business, industry, and government (**BIG SIGMAA**).

*Math Horizons* is growing and doing well. Several outstanding articles are planned for this year. Many mathematics departments provide copies of *Math Horizons* for their mathematics majors. Is your department providing copies for your majors?

Paul Zorn is completing a 5-year term as Editor of *Mathematics Magazine*. The five 2000-dated issues comprise 424 pages and 66 titles. Editorial help comes from 122 referees, about 20 associate editors and two editorial assistants. The acceptance rate is about 20%. Over 300 authors published in *Mathematics Magazine* during the last 5 years. Frank Farris of Santa Clara is the new Editor of *Mathematics Magazine*.

The **Mathematical Sciences Digital Library**, MathDL, [www.mathdl.org](http://www.mathdl.org) is an important new resource for mathematics faculty. This new web site lists all relevant published material, books and software with reviews and user comments, provides a wide range of high-quality learning materials reviewed and selected by editors you trust, and features an online journal that publishes the best learning materials, interactive mathematics, and articles on how students learn online. The Journal on Online Mathematics and Its Applications (JOMA) has just published Volume 1, Number 1 at [www.joma.org](http://www.joma.org)

Every decade, the **Committee on the Undergraduate Program in Mathematics** (CUPM) of the MAA issues curriculum guidelines. The guidelines have given departments guidance and have informed deans and other administrators about what they should expect of their mathematics faculty and how they should support their efforts. The new guidelines are scheduled to appear in the fall of 2002. The document entitled, "CUPM Discussion Papers about Mathematics and the Mathematical Sciences in 2010: What Should Students Know?", was distributed at the Board meeting and discussed at several special sessions during the Joint Meetings.

Woody Dudley, the Editor of the *College Mathematics Journal*, reported that 62 of 250 submitted manuscripts were published in five issues in 2000. Therefore, the acceptance rate is about 25%. There are enough manuscripts on hand for all of the 2001 issues and some of the 2002 issues.

The United States of America will host the **42nd International Mathematical Olympiad (IMO)** in the year 2001. The IMO was last held in the USA in 1981. The Olympiad will be held in Washington, DC, with opening ceremonies on July 4, 2001.

Please make plans to attend **Mathfest 2001** in Madison, Wisconsin, at the Monona Terrace Convention Center designed by Frank Lloyd Wright. Judy Garbiner, Michael Starbird, and Frank Morgan will deliver plenary lectures. Ten contributed paper sessions, six minicourses, and several panel discussions on various topics will be offered.

Respectfully submitted,

Vic Gummersheimer

# 2001 Workshops and Conferences

Announcing the 14th Cumberland Conference  
May 17-19, 2001  
University of Memphis, TN

The 14th Cumberland Conference on Combinatorics, Graph Theory, and Computing, aims to bring together internationally known researchers, university and college professors from throughout the southeastern region, some industrial mathematicians and computer scientists, graduate students in these fields, and some undergraduate students. Particular efforts are made to include faculty and students from smaller institutions throughout the region.

There will be four 45 minute talks by the principal speakers:

Gyula Katona	Renyi Institute of Mathematics, Hungary
Alexandr Kostochka	University of Illinois at Urbana-Champaign
Dana Randall	Georgia Institute of Technology
Bjarne Toft	Odense University, Denmark

and about twenty 20 minute talks, mostly by invited speakers.

To encourage participation, there will be no registration fee. There are also no parallel sessions, so participants can attend all talks.

For further information and registration see <http://www.msci.memphis.edu/~balistep/>

## MAA North Central Section's Summer Seminar

V. Frederick Rickey will be the lecturer at the North Central Section of the MAA 2001 Summer Seminar titled "The History of Mathematics". The seminar will be held from July 24 through July 27 on the campus of Bemidji State University in Bemidji, Minnesota. Flyers on the seminar will be available at the national meetings in New Orleans and more information is available at the following web site: <http://ea.bemidji.msus.edu/mathcs/seminar2001/>

June 3-8: Franklin & Marshall College, Lancaster, PA, Viewpoints

A hands-on workshop in Mathematics and Art. Activities include perspective drawings and viewing techniques, exploration of fractal geometry and its use in Asian art, exercises in tilings and symmetry, and writing in mathematics courses. Applications in courses throughout the mathematics curriculum: algebra, linear algebra, analysis.

Contact: Annalisa Crannell, [a\\_crannell@acad.fandm.edu](mailto:a_crannell@acad.fandm.edu)

June 18-22: Allegheny College, Meadville, PA, Integrated History of Algebra and Geometry

Presented by Professor Victor Katz, this short course will emphasize that these two subjects have been closely related from their origins, and that one should always keep that in mind when teaching at all levels. Sponsored by the Allegheny Mountain Section of the MAA.

Contact: Ron Harrell, [rharrell@allegheny.edu](mailto:rharrell@allegheny.edu)

June 21-24: USMA, West Point, NY, History of Undergraduate Mathematics in America

In celebration of the bicentennial of West Point, this conference will explore all facets of the History of Undergraduate Mathematic in America. There will be talks on the role that West Point has played in the development of undergraduate mathematics education in this country, but the conference is intended to include everything related to the development of undergraduate mathematics including textbooks, curricula, libraries, teachers, teaching methods, and the like. Contributed papers are welcome.

Contact: Fred Rickey, [fred-rickey@usma.edu](mailto:fred-rickey@usma.edu). Abstracts to: Amy Shell, [amy-shell@usma.edu](mailto:amy-shell@usma.edu)

June 24-30: Dickinson College, Carlisle, PA, Workshop Precalculus: Functions, Models, and Data

This NSF summer institute, based on the new Workshop Precalculus materials developed by Nancy Baxter Hastings and Allan Rossman of Dickinson College, will prepare participants to utilize the interactive teaching techniques and innovative technology that characterizes the workshop approach. It will provide them with the necessary background and support to adapt the Workshop Precalculus materials for use in their own environments. Faculty from high schools, community colleges, four-year colleges and universities are encouraged to apply.

Contact: Joanne R. Weissman, [weissman@dickinson.edu](mailto:weissman@dickinson.edu)

June 27-29: Ashland University, Ashland, OH, A Mathematical Sampler: 1669 - 1900

This workshop, presented by Professor William Dunham, examines a collection of mathematical landmarks from the middle of the seventeenth through the end of the nineteenth centuries. The theorems are the original work of such towering figures as Newton, the Bernoulli brothers, Euler, Gauss, and Cantor and come from the fields of analysis, number theory, algebra, geometry, complex variables and the theory of sets. They give historical perspective to topics encountered in college mathematics, and some can be transferred intact to the undergraduate classroom. Most importantly, these theorems represent the beauty of mathematics at its best. Sponsored by the Ohio Section of the MAA.

Contact: Thomas Dence, 419.289.5262, [tdence@ashland.edu](mailto:tdence@ashland.edu)

July 8-13: Wright State University, Dayton, OH, Tools for Uncovering Disease Patterns and Increasing Consumer Delight

This AMATYC/ASA Summer Institute will provide participants with curriculum elements and real-life examples of applications of statistics in business and public health. Statistical topics will be introduced and discussed and presenters will share their experiences in applying statistics on the job. On-site visits to

local industries are included. Participants will bring practical, "real-world" applications back to their classrooms.

July 27-29: Southwestern College, Winfield, KS, BRIDGES: Mathematical Connections in Art, Music, and Science

The Fourth Annual Conference exploring mathematical connections in art, music, and science. Topics will include: Fractals, Math and Music, Tessellations, Geometry in Quilting, M. C. Escher Work, Math and 3-Dimensional Art, Origami, Mathematics and Architecture, Computer-Generated Art, Math and Art in Culture, Art in Hyperbolic Geometry

Contact: Reza Sarhangi, 410.830.4450, [gsarhangi@towson.edu](mailto:gsarhangi@towson.edu)

July 30-August 1: Project NExT (a program of the MAA) will hold its workshop in Madison, Wisconsin, prior to Mathfest. Applications are due on April 13, 2001, and further information can be found on the Project NExT website (<http://archives.math.utk.edu/projnext/>).

August 2-4: University of Wisconsin, Madison, WI, Mathfest 2001

This is the annual summer meeting of the Mathematical Association of America. Join us in Madison this summer.

September 20-23: Radisson O'Hare, Chicago, IL Conference on Research in Undergraduate Mathematics Education

This conference, sponsored by the SIGMAA on Research in Undergraduate Mathematics Education, is a forum for researchers in collegiate mathematics education and includes the following themes: results of current research, contemporary theoretical perspectives and research paradigms, applications of learning theory to teaching practice, technology in mathematics learning, and general issues in the psychology of mathematics education as it pertains to the study of undergraduate mathematics.

Featured speakers: Marilyn Carlson, David Tall, Anna Sfard, and Patrick Thompson.

Proposal Deadline: May 15, 2001, Early Registration: August 15, 2001