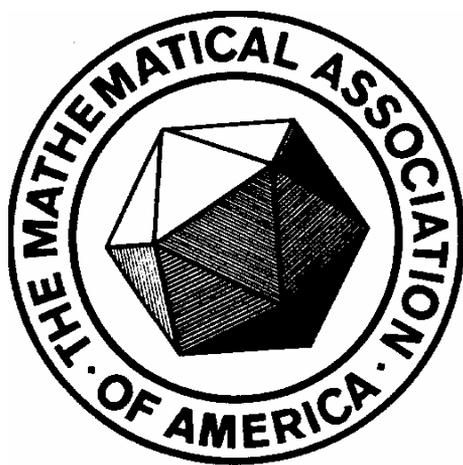


**The Mathematical Association of America  
New Jersey Section**



**Euler 300<sup>th</sup> Anniversary Meeting  
Rowan University  
Glassboro, NJ  
in conjunction with the fourth annual  
Garden State Undergraduate Mathematics Conference**

**Saturday, March 31, 2007**



## Abstracts and Biographies of Speakers

### An Euler Trifecta

*William Dunham, Muhlenberg College*

To recognize Leonhard Euler's 300<sup>th</sup> birthday, we consider three ingenious results from this great mathematician. First, we see a bit of Euler's *number theory* with his explanation of how to generate amicable numbers by the busload. Next, we get a glimpse of Euler's *calculus* as we watch him evaluate a definite integral that no one would dare to touch in Calc II. Finally, we observe Euler examining *complex variables* with an unorthodox proof of his famous identity. Taken together, these examples remind us why it is so fitting that we celebrate his birthday in 2007. (Note: This talk should be accessible to anyone familiar with calculus.)

**William Dunham**, who received his B.S. (1969) from the University of Pittsburgh and his M.S. (1970) and Ph.D.(1974) from Ohio State, is the Truman Koehler Professor of Mathematics at Muhlenberg College.

Trained in general topology, Dunham later became interested in the history of mathematics. He has directed NEH-funded seminars on math history at Ohio State and has spoken on historical topics at national and regional meetings as well as at the Smithsonian Institution, on NPR's "Talk of the Nation: Science Friday," and on the BBC.

In the 1990s, he wrote three books – *Journey Through Genius* (1990), *The Mathematical Universe* (1994), and *Euler: The Master of Us All* (1999). His expository writing has been recognized with the George Pólya Award in 1993, the Trevor Evans Award in 1997, and the Lester Ford Award in 2006. In addition, the Association of American Publishers designated *The Mathematical Universe* as the Best Mathematics Book of 1994. Dunham's most recent book is *The Calculus Gallery: Masterpieces from Newton to Lebesgue*, published by Princeton University Press (2005).

### The Joy of Student-Professor Collaboration in Translating Euler's Papers

*Thomas Osler, Rowan University*

Since the summer of 2006, four excellent undergraduate students have collaborated with me on translating five papers of Euler. I will discuss many of the surprising treasures we found in Euler's work. This includes shocking manipulations with divergent series, some forgotten properties of the conic sections and their generalizations, differential equations of infinite order and

more. I will also discuss the translation process we evolved. The Euler Archive, a web based collection of all of Euler's original works, seeks new translations and I hope to encourage you to contribute.

**Thomas Osler** is professor of mathematics at Rowan University. He received his Ph. D. from the Courant Institute at New York University in 1970 and is the author of 95 mathematical papers. In addition to teaching university mathematics for the past 46 years, Tom has a passion for long distance running. He has competed for the past 53 consecutive years. Included in his over 1950 races are wins in three national championships in the late sixties at distances from 25 kilometers to 50 miles. He is the author of two books about running.

**Primes and Orbits (joint MAA-GSUMC speaker)**

*Peter Sarnak, Princeton University and the Institute for Advanced Study*

Euler asked about primes in progressions as well as in other sequences; he also provided one of the basic tools for this study. I will review some of these and then explain some recent advances and settings, especially geometric ones associated with orbits, for seeking primes.

**Peter Sarnak**, Eugene Higgins Professor of Mathematics at Princeton University and currently also a member of the Institute for Advanced Study, was born in Johannesburg, South Africa, did his undergraduate work at the University of Witwatersrand, and then his Ph.D at Stanford University. Prior to coming to Princeton, he was a faculty member at the Courant Institute and at Stanford University. Sarnak has made major contributions to number theory, and to questions of analysis often motivated by number theory. He has received numerous prizes: the AMS Frank Nelson Cole Prize and, jointly with N. Katz, the Levi L. Conant Prize, the Ostrowski Prize from the Ostrowski Foundation, Basel, the Polya Prize of Society of Industrial & Applied Mathematics, and many others. He is a Member of the National Academy of Sciences (U.S.A.), and Fellow of the Royal Society (U.K.). He has served on numerous scientific advisory committees.

**Abstracts of MAA-NJ contributed paper sessions**

**Session 1: The Life and Work of Leonard Euler**, Wilson 206

Organizer and President: Lawrence D'Antonio, Ramapo College of New Jersey

1:50-2:05

Brian Hopkins, St. Peter's College, bhopkins@spc.edu

**Euler's Other Combinatorics**

You may know of Euler's work in graph theory, partitions, and Graeco-Latin squares, but his "Science of Combinations" included many other less well-known topics. This talk will survey recursive and asymptotic results on derangements, an algorithm for the Josephus problem, and some results on binomial and multinomial coefficients. Looking beyond his published articles, we will see that Euler also investigated what we know as Catalan numbers, including their generating function and a direct formula.

2:10-2:25

Lawrence D'Antonio, Ramapo College of New Jersey,  
[ldant@ramapo.edu](mailto:ldant@ramapo.edu)  
**An Euler Near Miss**

In Euler's vast repertoire there are several near misses, where Euler almost proves a particular result. The  $n = 3$  case of Fermat's Last Theorem is one of those near misses. There have been different opinions over whether Euler did in fact prove this case. We will examine Euler's proof and show where he falls short.

2:30-2:45

Edward Sandifer, Western Connecticut State University,  
[esandifer@earthlink.net](mailto:esandifer@earthlink.net)  
**Euler and the Hollow Earth**

Hollow earth theories abound. One is falsely attributed to Euler. We try to set the record straight.

2:50-3:05

Fred Rickey, U.S.M.A., [Frederick.Rickey@usma.edu](mailto:Frederick.Rickey@usma.edu)  
**Why Euler created trigonometric functions.**

In 1735, Euler found the differential equation  $k^4 \frac{d^4 y}{dx^4} = y$  to be "rather slippery." In 1739, he "rather unexpectedly" found the full solution, a solution involving trigonometric *functions*. Previously there were only trigonometric "lines" in a circle. Euler's views on trigonometry matured and in 1748 in his *Introductio in analysin infinitorum*, he introduced the trigonometric functions on the unit circle just the way we introduced them today. By the time he published his *Institutional calculi integrals* (three volumes, 1768-1770), he had a full

command of the solutions of first-order linear differential equations with constant coefficients.

**Session 2: Applications of Mathematics for Classroom Use**, Wilson 207  
Organizer and Presenter: Paul J.Laumakis, Rowan University

1:50-2:05

Mike Morelli, Rowan University, [morelli@rowan.edu](mailto:morelli@rowan.edu)

**Time Delays in Biological Systems**

This talk will be in two parts. The first is on the dynamics of the delayed logistic difference equation

$$X(n+1) = AX(n)(1-X(n-1)).$$

Putting in the delay makes the logistic equation much more complex to deal with than the one dimensional logistic

$$X(n+1) = AX(n)(1-X(n))$$

and not every initial condition will result in a biologically meaningful solution. If we have time, there will be a group discussion on when time delays are needed in biological models. Putting delays into a model greatly increases the mathematical complexity. How much better are models with delays and is the added mathematical complexity worth it? I am very interested in the audience's opinion on this topic.

2:10-2:25

Sandra M. Caravella, New Jersey City University,  
[scaravella@NJCU.edu](mailto:scaravella@NJCU.edu)

**Ancient Planetary Theory in the Mathematics Classroom**

Ancient mathematical astronomy, as epitomized by the work of Ptolemy, provides some of the earliest examples of mathematical models that describe the physical world. This talk describes a simplified version of Ptolemy's model of planetary motion, and surveys some Internet resources that help make the subject come alive. Material provided may be used to enrich a geometry, precalculus, liberal arts mathematics, or history of mathematics course.

2:30-2:45

David Marshall, Monmouth University, [dmarshall@monmouth.edu](mailto:dmarshall@monmouth.edu)

**Search Engine Mathematics: An Application for All Levels**

We will present some of the mathematics behind two of today's more popular internet search engines: Ask.com and Google. The

mathematics behind these modern applications has the attractive feature of being accessible across many different levels of college mathematics. Aspects of the application can be used and discussed in freshman level general education mathematics courses as well as beginning and advanced linear algebra and numerical analysis courses.

2:50-3:05

Paul J. Laumakis, Rowan University, [Laumakis@rowan.edu](mailto:Laumakis@rowan.edu)

### **Designing Runways Using Differential Equations**

This talk will highlight two applications involving differential equations to the design of aircraft runways. Both applications require determining a minimum required length of runway, one to be used for takeoff of a Boeing MD-11 passenger aircraft and the other to be used for safely landing the space shuttle. Both applications detail the use of mathematical modeling techniques typically encountered in an undergraduate course in differential equations.

## **Session 3: Contributed Papers in Statistics: Practice and Pedagogy**, Wilson 105

Organizer and Presider: Dexter C. Whittinghill, III, Rowan University

1:50-2:05

Mark Bailey, SAS Institute Inc., [Mark.Bailey@sas.com](mailto:Mark.Bailey@sas.com)

### **Basic Points of Confusion with Inference**

Many consumers and producers of statistics remain confused by the basic terminology and reasoning involved in the frequentist version of a hypothesis test in spite of the broad applicability and popularity of this technique. They may eventually come to treat it like a ‘black box,’ applying it mechanically and losing the essential qualities of each component: two exclusive hypotheses, significance, a sample statistic and its sampling distribution, a sample p-value, and power. I will illustrate the meaning of each part and the reason why each is vital, even after you have done such a hypothesis test ‘a million times.’

2:10-2:25

Christopher Tong, Merck Research Labs,  
[christopher\\_tong@merck.com](mailto:christopher_tong@merck.com)

### **Statistical Power Analysis and Sample Size Planning**

The concepts of Type I and Type II errors are introduced in an elementary statistics course. The Type I error is controlled by fixing the significance level, but the power of the test (1-Type II error rate) is often given more cursory treatment. We argue that a lesson should be included to illustrate the importance of power for sample size planning. A simple, approximate derivation of a sample size formula for the z-test illustrates the conceptual basis for power calculation, including operating characteristics, the distinction between statistical and practical significance, and plausible assumptions needed about the effect size.

2:30-2:45

Christopher J. Lacke, Rowan University, lacke@rowan.edu

**Preparing Students for Actuarial Exam P When You Don't Have a Program in Actuarial Science**

In this talk, I will discuss the issues associated with preparing mathematics majors for taking Actuarial Exam P - the introductory probability and mathematical statistics exam. Topics covered during this talk will include available study resources, a syllabus of exam topics, including a discussion of topics that typically do not arise in the introductory sequence, as well as necessary insurance-related topics, and study strategies to help reduce problem-solving time. I will also mention the development of concentrations and/or minors that assist students in organizing their actuarially-related studies, utilizing common courses offered by mathematical science departments.

2:50-3:05

Dexter C. Whittinghill, Rowan University, whittinghill@rowan.edu

**A Semester-Long Project for Getting Your Students to Look at Real Data That They Obtain Themselves: Refined.**

Since Cobb (1992) and contributors in "Heeding the Call for Change" emphasized the importance of using real data in our statistics courses, there have been numerous presentations at mathematical and statistical meetings about semester-long projects as a vehicle for getting students to look at real data. In San Antonio in January of 2006, I presented a two-stage project used the previous fall and my plan for a three-stage project that spring, where students find data of interest to investigate with techniques learned in the course. In this talk I will describe the project structure that I am using in "Statistics I," now in its third semester. I will provide examples of my assignments and address what

is working, what is not working, and issues with which I am still wrestling.

**Session 4: General Contributed Papers, Wilson 204**

Organized by Theresa C. Michnowicz, New Jersey City University

Presider: Christopher Simons, Rowan University

1:50-2:05

Zhixiong Chen, New Jersey City University, [zchen@njcu.edu](mailto:zchen@njcu.edu)

**Mesoscopic Modeling of Surface Process**

In this paper, we study mesoscopic models of particle diffusion in several interacting particle systems. These mesoscopic models are stochastic or deterministic integrodifferential equations and are derived through an exact coarse-graining, directly from microscopic lattice models, and include detailed microscopic information on particle-particle interactions and particle dynamics. Previous results are limited to one particle species, however in many applications the diffusion mechanism involves several types of particles. We derive the mesoscopic theories for such complex multi-species dynamics.

2:10-2:25

Jay Schiffman, Rowan University, [schiffman@rowan.edu](mailto:schiffman@rowan.edu)

**A Mini-showcase of Intriguing Prime Numbers**

The prime numbers serve as the atoms of the natural number system. The paradoxical nature of these entities in the sense that their infinitude is counterbalanced by gaps of any desired length between consecutive entries in no small measure is responsible for their wide appeal. In this presentation, certain integer sequences of primes will be discussed in relationship to the role they play in mathematical recreations. Participants will marvel at such phenomena as the initial primes that yield five and six consecutive primes in arithmetic progression respectively, a magic square of order three that is comprised of consecutive primes, the primes that result from repeated concatenation of the composite integers 8 and 80 (i.e. their respective Home Primes), what remarkably transpires when we behold the prime 357686126462216567629137 by successively chopping off its left-most digit, the largest known twin prime pair in 1975 (and why it seemed difficult to secure a larger one) to the appealing prime

(continued on page 12, after the schedules)

**Mathematical Association of America  
New Jersey Section**

**Euler 300th Anniversary (Spring 2007) Meeting Program**

*All sessions except the concurrent sessions at 1:30 p.m. will take place in Wilson Hall 101 (Boyd Recital Hall)*

8:30 – 9:15	Registration and Coffee, Wilson Hall, first floor
8:30 – 1:30	Book Exhibits, Wilson Hall first floor (outside Boyd Hall)
9:15 – 9:30	<b>Welcome by Dr. Jin Wang, Associate Dean of the College of Liberal Arts and Sciences, Rowan University</b>
9:30 – 10:25	<b><i>The Joy of Student-Professor Collaboration in Translating Euler's Papers</i>, Thomas Osler, Rowan University</b>
	President: Jay Schiffman, Rowan University
10:25 – 11:05	Intermission, Wilson Hall first floor (outside Boyd Hall)
	<b>Publisher presentations:</b>
	<i>Content on Demand</i> , John Moncada, Key College Publishing, Wilson 105
	<i>Eduspace</i> , Theresa Cortesini, Houghton Mifflin, Wilson 114
11:05 – 11:25	Chair's and Governor's Reports, and recognition of 25- and 50-year members, Presentation of <b>Distinguished Service Award</b> and <b>Distinguished Teaching Award</b>
11:25 – 12:20	<b><i>An Euler Trifecta</i>, William Dunham, Muhlenberg College</b>
	President: F.Olcay Ilicasu, Rowan University
12:20 – 1:50	<b>Lunch</b> , Student Center Marketplace (Book exhibits end at 1:50.)
1:50 – 3:05	<b>MAA-NJ Contributed paper sessions</b> (concurrent): <i>All sessions are in Wilson Hall</i>
	The Life and Works of Leonard Euler: Wilson 206
	Applications of Mathematics for Classroom Use: Wilson 207
	Statistics: Continuing Challenges in Education and Practice: Wilson 105
	General Contributed Paper Session: Wilson 204
3:05-3:25	Intermission and refreshments, Wilson Hall first floor (outside Boyd Hall) (Silent Auction bidding ends at 3:25)
3:25 – 4:20	<b><i>Primes and Orbits</i>, Peter Sarnak, Princeton University</b>
	President: Aihua Li, Montclair State University
4:20 – 4:30	Contest Results, Awards, Drawing of door prizes, Silent Auction Winners announcement (must be present to win)
5:00	Dinner honoring Award Winners, Invited Speakers and Workshop Leaders

## Garden State Undergraduate Math Conference Spring 2007 Program

8:30 – 10:00	Registration and Breakfast, Wilson Hall, second floor balcony
8:30 – 9:00	Check-in for Math Competition Wilson Hall, second floor balcony
9:00 – 12:00 (9:00 – 10:00) (10:00 – 12:00)	<b>Garden State Undergraduate Math Competition</b> Individual Session Team Session Headquarters: Wilson Hall 203
12:00 – 1:00	<b>Lunch:</b> Students, Wilson Hall Lobby Faculty, Student Center Marketplace
1:00 – 1:45	<b>Career Workshops</b> (running concurrently): <i>Panel: Careers in Middle School Mathematics</i> , Ken Wolff, Montclair State University moderator: Wilson 203  <i>What is a Research Experience for Undergraduates Program (REU) and how do I participate?</i> Brenda Latka, DIMACS: Wilson 205  <i>Careers in Actuarial Sciences</i> , Gail Hall, Actex Publications: Wilson 212
1:50 – 3:00	<b>Students Talks:</b> <i>Wilson Hall</i> Student Session 1: Wilson 212 Student Session 2: Wilson 203 Student Session 3: Wilson 205
3:00 – 3:25	<b>Student Poster Session</b> (Presenters will be at their posters and available for questions): Wilson second floor balcony <b>Refreshments:</b> Wilson Hall first floor (outside Boyd Hall)
3:25 – 4:20	<b><i>Primes and Orbits</i></b> , <b>Peter Sarnak</b> , Princeton University Wilson Hall 101 (Boyd Recital Hall) Presider: Aihua Li, Montclair State University
4:20 – 4:30	Contest Results, Awards, and Prizes, Wilson 101
4:30	End of Conference

(continued from page 9)

22439962446379651. Please join us to witness the fascinating lighter side of mathematics.

2:30-2:45

Maria Alzugaray Rodriguez, Suffolk County Community College,  
[alzugam@sunysuffolk.edu](mailto:alzugam@sunysuffolk.edu)

### **How to Solve Certain Problems Related to the Euler Line**

The gravity center, the orthocenter and the circumcenter of a triangle are aligned. The line passing through them is called the Euler line of the given triangle. We will show constructions allowing us to obtain triangles with a prescribed Euler and other prescribed elements.

## **Publisher Presentations**

During the morning break, two publishers will give presentations:

### **Content on Demand: Complete, Textbook-Free, Online Mathematics Courses**

Presentation by John Moncada, Key College Publishing

Content on Demand provides professionally designed and produced web-based mathematics courses to college and university faculty, offering the ability to teach courses online immediately with no additional course-building necessary! COD courses do not require textbooks and are built for delivery through the Blackboard and WebCT course management systems, but you need not be licensed in either to use the courses. Visit [www.CODcourses.com](http://www.CODcourses.com).

### **Eduspace**

Presentation by Theresa Cortesini, Houghton Mifflin

Eduspace, powered by Blackboard, is Houghton Mifflin's on-line learning environment. Join us to explore the resources available for math titles within Eduspace. Eduspace is an integrated set of robust teaching resources, classroom management functions, and text-specific content that you can use to create and manage your course via an on-line system. Perfect for lecture-based, self-paced, or distance-learning courses, Eduspace, a comprehensive, flexible program, can be easily customized to fit your course needs. We look forward to seeing you.

## Announcements

### **Lunch discussion tables for Spring 07 meeting**

Organized by Theresa C. Michnowicz, New Jersey City University

There will be 5 discussion tables at lunch (in addition to one for NJ-NExT).

1. Sociology of modern research in mathematics: multiple authorship, correctness of refereeing, etc, led by Peter Sarnak, Princeton University and the Institute for Advanced Study
2. Collaborating with undergraduates on research that leads to papers in expository journals, led by Tom Osler, Rowan University
3. Who is the 20<sup>th</sup> century's best approximation to Euler? led by William Dunham, Muhlenberg College
4. Integration of application projects in mathematics courses, led by Paul Laumakis, Rowan University
5. What technologies should I be using in my undergraduate statistics courses? led by Dexter Whittinghill, Rowan University

Those who pre-registered have priority at these discussion tables. We look forward to a set of lively and interesting discussions!

### **MAA-NJ Fall 2007 Meeting**

The Fall 2007 MAA-NJ Section meeting will be a joint meeting with the Metropolitan New York Section. It will be held on Saturday, November 3 at St. Peter's College, Jersey City, NJ.

### **Call for Lunch Table Discussion Leaders at Fall 2007 Meeting and Contributed Paper Session Organizers and Topics for the Spring 2008 Meeting**

Please submit proposed topics to Theresa C. Michnowicz, New Jersey City University, 201-200-3219, [tmichnowicz@njcu.edu](mailto:tmichnowicz@njcu.edu), by September 20, 2007.

### **Other Future MAA-NJ Meetings**

The Spring 2008 Meeting will be held at William Patterson University, Saturday, April 12. Arthur Benjamin, of Harvey Mudd College, will be the joint MAA-GSUMC speaker.

### **MathFest 2007**

The Mathematical Association of America will hold its annual MathFest in San Jose, CA, August 3-5, 2007. Check MAA Online at <http://www.maa.org> for more information about MathFest.

### **Other future national MAA meetings**

2008 Joint Mathematics Meeting, San Diego, CA, January 6-9.

2008 MathFest, Madison, WI, July 31-August 2, 2008.

2009 Joint Mathematics Meeting, Washington, DC, January 7-10, 2009

2009 MathFest, Portland, OR, August 6-8, 2009

### **2007 PREP Workshops**

The program costs as well as the costs of food and lodging during the workshop are covered by PREP. However, there is a registration fee for each workshop. Visit MAA Online at <http://www.maa.org/Prep/2007/> for information.

### **Mathematics Study Tour**

There is an MAA Euler Study Tour July 1 - 14, 2007, which will visit Basil, St. Petersburg, and Berlin. Information at [http://www.maa.org/euler\\_trip/](http://www.maa.org/euler_trip/)

### **NSF Chautauqua Short Courses**

See schedule at <http://www.massachusetts.edu/chautauqua/courses.cfm>

### **NJ-NExT**

The next series of NJ-NExT workshops for new (i.e. in their first four years of full-time teaching in New Jersey) faculty members in New Jersey will begin on Friday, November 2, 2007, the Friday preceeding the fall New Jersey MAA section meeting. Please contact Bonnie Gold, [bgold@monmouth.edu](mailto:bgold@monmouth.edu), if you are interested in becoming a NJ-NExT fellow, have new faculty at your institution who are potential participants, or have an appropriate workshop topic you would like to present.

### **Call for Nominations for the New Jersey Section Award for Distinguished College or University Teaching**

The MAA-NJ Section Distinguished Teaching Award Selection Committee is seeking nominations for the 2008 Distinguished College or University Teaching Award. Please consider nominating an inspiring, respected, or influential deserving colleague for this prestigious award. Information about the nomination process and eligibility requirements are posted on the section's website at <http://www.maa.org/newjersey> . The winner of the award will be recognized at the Spring 2008 meeting. For more information about this award you may contact Naomi Shapiro (Secretary of the MAA-NJ Section) at [shapiro@georgian.edu](mailto:shapiro@georgian.edu), 732-987-2340.

### **Distinguished Service Award**

The recipient of the 2007 MAA-NJ Award for Distinguished Service is Reginald

Luke, Middlesex County College. Reginald Luke has an impressive history of service in the MAA-NJ Section. He served as Governor (2003-2006) and as Chair (2000-2002) of the NJ Section. He hosted Section/GSUMC meetings at Middlesex County College (Spring 1997, Fall 2001, Spring 2005). He became a member of the MAA-NJ executive committee in 1999 and has served on several subcommittees, including the 50th Anniversary Meeting Committee, By-laws Revision Committee, and the Awards Committee. He is currently chair of a subcommittee which will organize a meeting for all NJ college mathematics departments to discuss articulation agreements in response to the new State Transfer Agreements. Reggie continues to host the executive committee meetings at MCC.

At the MAA national level, Reggie served on the Committee on Faculty Development (1993-96) and currently serves on the Committee on Sections (2005-8), Committee on Math Education (2004-7, 2007-10), and the Committee on Two-Year Colleges (2005-8).

MAA-NJ benefits greatly from Reggie's leadership and service to our organization.

### **Conference honoring Barbara Osofsky**

The International Conference on Rings and Things, to be held June 15-17 at Ohio University in Zanesville, Ohio, will be dedicated to Carl Faith on his 80th birthday and Barbara Osofsky on her 70th birthday. Barbara Osofsky, of Rutgers University, was the 2005 recipient of the MAA Certificate of Meritorious Service. More information about the conference can be found at [http://math.ohiou.edu/~jain/ou-z\\_conference/](http://math.ohiou.edu/~jain/ou-z_conference/).

### **Mathematics Awareness Month**

April is Mathematics Awareness Month. The theme for this year's Mathematics Awareness Month is "Mathematics and the Brain". For more details, see <http://www.mathaware.org/mam/07/announcement.html>.

### **Dinner Honoring Award Winners and Invited Speakers**

The Section will honor award winners and the invited speakers at dinner following the meeting. Everyone is cordially invited.

**JOIN THE MAA** (<http://maa.org/mbsvcs/future.html#joinmaa>).

### **Governor's Report**

The MAA has proclaimed 2007 as the Year of Leonhard Euler. There

will be an MAA study tour this summer tracing his life from his birth in Basil in 1707 to his death in St. Petersburg in 1783.

More sadly, we mourn the deaths of Paul Halmos, who died in October, and Don Kreider who died suddenly on December 7. Don was president of the national MAA in 1993-94 (<http://www.maa.org/news/120806kreiderobit.html>). Paul (<http://www.maa.org/news/100306halmos.html>) was a member of the Board of Governors about 30 years ago, wrote many highly readable books and papers, and with his wife donated \$3 million to the MAA to restore the Carriage House in Washington as a mathematical conference center. The first conference in the Carriage House was held just before he died.

The first reports of the long-term planning groups were presented at the Board of Governors meeting on January 4 in New Orleans. The group about membership concluded that MAA programs are of high quality, including the conferences, mini-courses, short courses, summer courses, NExT, and study tours. The committee suggested some professional development opportunities be on the web, and that there be others on-site of 3-day duration. It might be a good time to offer help for institutions granting a terminal master's degree, since they tend to provide the preparation for 2-year college faculty.

The report of the AMC (American Mathematics Contest) was animated. About 150,000 youngsters take the exams each year in 8th, 10th, and 12th grades. We heard how they stimulate exciting mathematical conversation among high school students for days afterward. The top winners get to take another exam, whose top placers get to take yet another. The twelve top students from this third exam get to spend weeks in the summer preparing for the International Mathematics Olympiad (IMO), and six of these then compete in the IMO. Currently there are two versions of the AMC given on two different days each year. The committee proposed making one of these "floating" to accommodate a variety of schedules. This prompted a lively discussion about security. "How much security do you need when the top prize is permission to take another exam?"

The Canadian governor protested that the report that gave only the United States' standing, when Canada is also part of the MAA, and he represents Canada at the BoG meeting. "Some people here have the same problem as in Washington. You don't seem to realize other countries exist." An apology was extended.

The Revenue committee had good news. When the Halmos' gave their gift in 2002, the MAA had a little over \$3 million in non-building assets. After spending \$2.5 million on the building, it now has \$6.2 million. Book sales have been good, investments have thrived, and other income has been healthy. We now have a contingency fund of \$3 million, and plans are to increase it soon.

The proposal for lower or eliminated dues for elderly members met with

a

mixed reception, and decisions were postponed. One governor insisted that young members need discounts more than the elderly as they struggle with beginning academic salaries, starting families, and buying homes.

Donna Beers spent the fall semester as a Visiting Mathematician at the Washington headquarters. She gave a report, beginning by urging others to do likewise. She spent the time developing programs, especially for departmental self-studies and workshops for department chairs.

There are now video clips of exciting math and science subjects (such as juggling and “where do hurricanes go?”) available for local TV stations. If members can help place them, let national know.

The MAA is a healthy, congenial organization now. Its one piece of business at the business meeting, however, was to vote into place a method for eliminating officers who have misbehaved. The last piece of business in New Orleans was Carl Cowen handing over the presidential gavel to Joseph Gillian. Joe quipped that it was just coincidence that his presidency immediately followed the passing of a resolution to remove officers.

Pat Kenschaft, Governor for New Jersey

## News from NJ Departments

**Montclair State University** Three faculty members, Ken Wolff, Mika Munakata, and Mary Lou West, in the Department of Mathematical Sciences at Montclair State University have been awarded a 5-year, \$2.8 million grant from the National Science Foundation. The project, titled “GK12 Fellows in the Middle: Partnerships of Inquiry and Interdisciplinary Middle School Science and Mathematics” matches science and mathematics graduate students from Montclair State University with middle grade teachers in five local districts—Kearny, North Arlington, Lyndhurst, Rutherford and East Rutherford. The project’s main goals are to enhance graduate students’ communication skills, strengthen teachers’ content knowledge, and improve science and mathematics achievement in the middle school. Each year eight graduate students, together with their research advisors, will conduct research and share those research experiences with middle school teachers and students. Other project activities include training, field trips, and development of curriculum units. For more information, please go to [csam.montclair.edu/gk12](http://csam.montclair.edu/gk12).

**New Jersey City University** The NJCU Mathematics Awareness Lectures will be held at New Jersey City University on Thursday, April 19, 2007. The theme is Mathematics and the Brain, [www.mathaware.org](http://www.mathaware.org). Invited speakers are Biyue Liu, Monmouth University, and Dawn Lott, Delaware State University. For

information please contact Theresa C. Michnowicz, tmichnowicz@njcu.edu, 201-200-3219.

### **MAA-NJ Officers**

<b>Chair</b>	Mark Korlie, Montclair State University
<b>Chair Elect</b>	Hieu D. Nguyen, Rowan University
<b>Vice Chair for</b>	
Speakers	Bonnie Gold, Monmouth University
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