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# Metro Math

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Newsletter

**Metropolitan New York Section of  
The Mathematical Association of America**

February 2007



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**Bronx**

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## **ANNUAL MEETING**

**Sunday, 6 May 2007**

**8:00 AM – 5:20 PM**

**Sarah Lawrence College  
Bronxville (Lower Westchester County), NY**

*(More Information Contained Within)*

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## SECTION OFFICERS

Section Governor (2005 – 2008)	<b>John (Jack) Winn</b> Farmingdale State (SUNY)	(631) 420-2571 jack.winn@farmingdale.edu
Chair (2006 – 2009)	<b>Dan King</b> Sarah Lawrence College	(914) 395-2424 dking@slc.edu
Chair-Elect (2006 – 2009)	<b>Farley Mawyer</b> York College (CUNY)	(718) 262-2939 mawyer@york.cuny.edu
Secretary (2006 – 2009)	<b>Henry Ricardo</b> Medgar Evers College (CUNY)	(718) 270-6429 henry@mec.cuny.edu
Treasurer (2006 – 2009)	<b>Mohammad Javadi</b> Nassau Community College (SUNY)	(516) 572-7972 javadim@ncc.edu
Vice-Chair for Four-Year Colleges (2006 – 2009)	<b>David Seppala-Holtzman</b> St. Joseph's College	(718) 636-7254 dholtzman@sjcny.edu
Vice-Chair for Two-Year Colleges (2006 – 2009)	<b>Jerry G. Ianni</b> LaGuardia Community College (CUNY)	(718) 482-5739 ianni@lagcc.cuny.edu
Vice-Chair for High Schools (2006 – 2009)	<b>Chris Bergersen</b> MacArthur High School	(516) 456-2016 cbergersen@levittown.k12.ny.us
Math Fair Chair – NYC	<b>Randy J. Asher</b> Brooklyn Technical High School	(718) 804-6500 rasher@schools.nyc.gov
Math Fair Chair – Long Island	<b>Joseph Quartararo</b> Northport-East Northport Public Schools	(631) 584-2016 cmleague@optonline.net
Speakers Bureau Chair	<b>Abraham S. Mantell</b> Nassau Community College (SUNY)	(516) 572-8092 mantell@ncc.edu
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Public Relations Chair	<b>David Seppala-Holtzman</b> St. Joseph's College	(718) 636-7254 dholtzman@sjcny.edu
Book Exhibit Coordinator	<b>Henry Ricardo</b> Medgar Evers College (CUNY)	(718) 270-6429 henry@mec.cuny.edu
Liaison Coordinator and Webmaster	<b>Raymond N. Greenwell</b> Hofstra University	(516) 463-5573 matrng@hofstra.edu

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### Section Web Page – [www.maa.org/metrony](http://www.maa.org/metrony)

Contact Raymond N. Greenwell at [matrng@hofstra.edu](mailto:matrng@hofstra.edu) if you wish to add some interesting or useful information to the section web site. The section gratefully thanks Ray for maintaining the site over the past few years!

**National Web Page – [www.maa.org](http://www.maa.org) (both sites are linked to each other)**

## TABLE OF CONTENTS

List of Section Officers . . . . .	2
Table of Contents . . . . .	3
Map and Membership Count of the Metro NY Section . . . . .	3
Message from the Chair, by Dan King . . . . .	4
Message from the Chair-Elect, by Farley Mawyer . . . . .	5
Message from the Governor, by Jack Winn . . . . .	6
Treasurer’s Report, by Mohammad Javadi . . . . .	7
<u>NOTICE</u> : Future of the Newsletter . . . . .	7
25 and 50 Year Members . . . . .	7
2007 Annual Spring Meeting Program (Preliminary) . . . . .	8
Call for Abstracts (Contributed Papers and Posters) . . . . .	8
Abstract and Bio of Invited Speaker Manjul Bhargava . . . . .	9
Abstract and Bio of Invited Speaker Francis Edward Su . . . . .	9
Brief Bios of the Panelists for: <i>The Situation Today: Continuing Challenges for Girls and Women in Mathematics</i> . . . . .	9
Directions to the Annual Spring Meeting . . . . .	10
Registration Form for Spring Meeting . . . . .	12
Featured Article: <i>A New SIGMAA: Mathematics and the Arts</i> , by Anne Burns . . . . .	13
News from our Section . . . . .	14
Call for Participants & Involvement . . . . .	15
Events Calendar (Local and National) . . . . .	18
News from the MAA . . . . .	19
<i>I Believe in Arithmetic</i> (Part I), by Seymour W. Pustilnik . . . . .	21
Paid Advertising . . . . .	22
Annual Spring Meeting Announcement Poster (please post in your department) . . . . .	23

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### Metropolitan New York Section of the MAA



**Membership Count: 1206 as of January 19, 2007**

## MESSAGE FROM THE SECTION CHAIR

As is the tradition every three years, we have a new team of officers this year in our section of the MAA. I am thrilled to be the organization's new chair. I am also very excited with the opportunity to collaborate with my talented and energetic team of fellow officers for the next three years. I only hope we can guide the section's programming and events as deftly as the team that has served us so well for the past three years. In particular, I hope I can live up to the legacy of outgoing chair Abe Mantell who continues (impressively!) to serve the section not only as Newsletter Editor but also as Director of the Mathematics Speakers Bureau.

As I became chair of the section this past spring it dawned on me that I didn't really know who we are as a group of mathematicians. Like a child, I was curious to learn certain details about my family. Who are we in the MAA Metro New York Section? How many strong is our tribe? Where do we live and how widely spread are we geographically? Where do we work and at what types of institutions? How do we compare to other sections of the MAA? And like a child, I relied on the knowledge of parents to find the answers to my questions. Specifically I turned to Hal Nesbitt, the closest thing our organization has to a parent. Hal works at the MAA national headquarters in Washington DC and was very generous in providing all the information that is contained below.

Though we are the smallest of the MAA's 29 sections geographically (that is, in terms of land area), we are the sixth largest in terms of membership. Our members, more than 1200 at last count, are spread out among New York City's five boroughs and eleven surrounding counties. The distribution of mailing addresses for our members is given below.

In terms of employment, the majority of us are involved in education at one level or another. However, over 10% of us are involved in non-academic positions as the distribution below draws out.

<b>56%</b>	<b>New York City including</b>
	22% Manhattan
	13% Queens
	11% Brooklyn
	6% Bronx
	3% Staten Island
<b>23%</b>	<b>Long Island including</b>
	13% Suffolk
	10% Nassau
<b>16%</b>	<b>Northern Counties including</b>
	11% Westchester/Putnam
	5% Rockland/Orange/ Sullivan/ Dutchess/Greene/Columbia/ Ulster
<b>4%</b>	<b>Exotic Lands including</b>
	1% New Jersey
	3% Other States/Countries

<b>62%</b>	<b>Education – Faculty</b>
	15% Four Year University
	14% Four Year College
	7% Two Year College
	8% Elem./Middle/High School
	1% Other
	6% Unknown
	12% Retired
<b>12%</b>	<b>Education – Students</b>
<b>9%</b>	<b>Business</b>
<b>2%</b>	<b>Web</b>
<b>1%</b>	<b>Government</b>
<b>2%</b>	<b>Other</b>
<b>12%</b>	<b>Unknown</b>

Finally, in terms of gender distribution our section is approximately 75% male and 25% female. Note that no membership information is available in terms of race or ethnicity.

(continued)

Knowing who we are, where we are and what we do helps the officers make more informed decisions regarding section programming. Historically we have moved around the location of the annual spring meeting to best serve our membership. Our next meeting is on Sunday, May 6 at Sarah Lawrence College in Bronxville (lower Westchester County). Details of this meeting (including registration information) are contained in this newsletter. Further, we will have a special joint fall meeting with the New Jersey Section on Saturday, November 3 at St. Peters College just across the Hudson River in Jersey City. So mark your calendars with these important dates! Locations of future meetings are to be determined. If your institution would be willing to host a future meeting, please contact a section officer.

Finally, I close with a request. I ask that you contact me or another officer if you have any suggestions regarding future section programming or speakers or if you wish to get involved with section planning. As always, we welcome your thoughts, suggestions, and participation!

Best wishes for a productive and enjoyable spring term. I hope to see many of you at the May meeting!

Dan King

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## MESSAGE FROM THE SECTION CHAIR-ELECT

I was recently thinking about a little thing which turned out to make a big difference in my life. It was at a section meeting about 25 years ago when Lily Christ suggested to me that I become more involved in Section activities. (I think she says that to everyone but not enough of us heed that sage advice.) Anyway, I went to my first Delegate Assembly meeting in 1984 (I think that possibly that year invitations went out to the entire membership and not just the “delegates” but, not realizing that fact I responded that I would attend and did.)

Over all these years I got to meet and work with so many mathematicians dedicated to enhancing the mathematical lives of our membership and beyond. It takes much effort to put together meetings each year and, as I’m sure you’ve noticed, we have been able to get excellent speakers and also interesting panel presentations. There is an opportunity for both students and professional mathematicians to present their research in our contributed paper sessions. In addition to our own meeting during the first weekend in May, this past October we had a meeting at Marist College (which is in the Metropolitan NY Section) jointly with the Seaway Section. Besides our upcoming meeting at Sarah Lawrence College we are also planning to have a joint meeting with the NJ Section on November 3, 2007 at St. Peter’s College in Jersey City, NJ. Other Section activities include the local math fairs and the Mathematical Speakers Bureau which is much too underutilized, in my opinion. There are many good teachers who are happy to give wonderful talks to all levels of audiences but this service could be tapped more often.

Ever since I started to become active I have had the opportunity to do so at so many levels. There is just so much that can be done and so many ways in which others could become involved. I would like to publicly thank Lily for her initial encouragement and I would like to continue her work by encouraging you to further involve yourselves with MAA activities. You won’t be sorry.

Farley Mawyer

## MESSAGE FROM THE SECTION GOVERNOR

The Board of Governors met on January 4, 2007 in New Orleans, LA. The Board took action on nine items and dealt with four informational/consent items related to routine business. The Board agreed to change the order of the agenda to first consider the Cycle I Strategic Planning Reports. The Cycle I working group topics were (a) the American Mathematics Competitions (AMC) (b) Professional Development and (c) Revenue. A written report was provided by each committee and the committee chair also made an oral presentation. The reports addressed the strengths, weaknesses and threats in each of the given areas. All of the reports were very complete, made specific suggestions and stated future goals. Preliminary Reports were made by the Cycle II working groups which addressed the topics of (a) MAA Governance and (B) Student Activities. Later in the day we split into focus groups to discuss student activities. The BOG voted on the topics for Cycle III of Strategic Planning and chose the topics: (a) Meetings and (b) Sections. All written reports have been placed in a loose-leaf binder and are available at your request.

President Carl Cowen reported on professional trips he made to attend meetings and visit mathematics departments in Madrid and Africa. President Cowen is an advocate of establishing a relationship with other parts of the world especially because he has found that our concerns concerning Science, Technology, Engineering, and Mathematics (STEM) education are also their concerns. He noted that countries such as China, that are known for the attention they give to STEM education, even express a great deal of concern about falling behind in these areas. President Cowen noted that Congress is interested in STEM issues.

Treasurer John Kenelly reported that we are well on the path to achieving his goal of 10-10-10-10 (in millions) in each of the four respective categories: budget, investments, building and grants. Our investments are doing well and our investment advisors have been very helpful. He emphasized that we estimate low on the income side and high on the expense side. This strategy appears to have served us well.

The Report of the Budget Committee, a subcommittee of the MAA Executive Committee, was given by the Committee Chair, James Daniel. It looks like we ended the 2006 year on budget. The recommended 2008 dues increase of about 5% was passed by the BOG. An amendment was made to **NOT** apply this increase to the Retired category but after much discussion, the amendment failed to be passed by the BOG. Also Section 3 of Article VIII (Dues) of the Bylaws was changed (by a Bylaw vote of the BOG) to read:

3. Any individual member who meets criteria established by the Board in terms of any or all of age, years of membership, and employment status, may, without paying dues or subscribing to a journal, be an Emeritus Member. Emeritus Members have all the benefits of Membership except the inclusion of a subscription to an Association journal or periodical at Member rates. Emeritus Members may be eligible for additional benefits as may be determined by the Executive Committee at costs determined by the Executive Committee.

After much discussion the Board-established criteria for Emeritus Membership under Article VIII Section 3 was tabled and will be taken up again at the next BOG meeting.

In the Report of the Secretary, Martha Siegel thanked Carl Cowen for serving as President. Birthday cards to retired past distinguished members and MAA officers were passed around for signatures of the BOG. It was noted that we lost another friend of the MAA, G. Bailey Price, who served as President in 1957 and 1958 (he was 101 years of age).

The BOG voted on a new member of the Audit and Budget Committee. The election result will be announced.

In the Committee on Sections Report, Nancy Hagelgans noted that they are working on a web based questionnaire for the Section's Annual Report. This would replace the paper version. The BOG passed a

(continued)

Committee on Sections proposal to change the procedures for amending section bylaws. The new procedures incorporate the following:

- Sections are encouraged to review their bylaws every ten years on a rotating schedule and
- Specific, limited amendments to section bylaws will be considered by the Committee and Board without scrutiny of the entire document in the intervening years.

It was reported in the Coordinating Council on Meetings Report that the goal of having MathFest break even financially was reached in 2006.

Other reports from the Washington Office, Editors, and Committees were also made which addressed matters of routine MAA business. This report is an attempt to touch upon some of the highlights of the meeting. The MAA remains firmly on track in fulfilling its mission.

Jack Winn

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### TREASURER'S REPORT (as of 1/15/07)

Business Checking	\$ 8,380.66
Business Money Market	\$ 9,212.21
6-Month Business CD	\$30,393.88
<hr/>	
Total	\$47,986.75

All accounts are with J.P. Morgan Chase Bank. Further details will be provided at the annual meeting.

Mohammad Javadi

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### \*\*\* NOTICE: FUTURE OF THE NEWSLETTER \*\*\*

In an effort to save time, money, and the environment, beginning next year, the newsletter will not be mailed to all members in the Section – as in years past. Instead, members will receive both an e-mail and postcard containing the essential information concerning the May meeting along with the link to the Section webpage, where the registration form and a PDF version of the newsletter can be found. Members wishing a paper copy of the newsletter may request one from the editor.

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### 25 and 50 Year Members

The following members will be recognized during the Awards Ceremony at our May meeting. The 25 year members are offered free registration, and the 50 year members free registration and lunch (who said there's no such thing as a *free lunch*?!!). ☺

25 Years: David N. Adler (Dowling College), Barbara Bohannon (Hofstra University), E. E. Kriekhaus, Edward G. Ostling (Hofstra University), Sheldon N. Rothman (LIU – CW Post), Jonathan D. Sondow, Sherwood Washburn (Seton Hall University).

50 Years: Yi C. Chow (IBM, retired), Michael Goldstein, Norman Grossman, Nathaniel R. Riesenber (Brooklyn College – CUNY), David I. Shelupsky (CUNY).

## 2007 SPRING MEETING PROGRAM (Preliminary)

8:00 – 9:00 AM	Registration, Refreshments, Book Exhibits, Silent Auction Bidding
9:00 – 9:15 AM	Welcoming Remarks: Michele Myers, Sarah Lawrence College President Dan King, MAA Metropolitan New York Section Chair
9:15 – 10:15 AM	Invited Speaker: <i>Sums of Squares and the 290-Theorem</i> <sup>1</sup> Manjul Bhargava, Princeton University
10:15 – 10:30 AM	Break
10:30 – 12:00 AM	Panel Discussion: <i>The Situation Today: Continuing Challenges for Girls and Women in Mathematics</i> <sup>2</sup> Panelists: Joan Birman, Barnard College-Columbia University Ann Gallagher, Law School Admissions Council Abbe Herzig (moderator), University at Albany (SUNY)
12:00 – 1:30 PM	Lunch (with time to visit book exhibits, place a bid in the silent auction, or tour the campus)
1:45 – 2:30 PM	Awards Ceremony (including Raffle and Silent Auction Results with some Sectional Business)
2:30 – 3:30 PM	Invited Speaker: <i>Preference Sets, Graphs, and Voting in Agreeable Societies</i> <sup>1</sup> Francis Edward Su, Harvey Mudd College
3:40 – 5:20 PM	Contributed Paper and Poster Sessions

<sup>1</sup> See page 9 for Abstracts and brief Bios of Manjul Bhargava and Francis Su

<sup>2</sup> See page 9 for brief Bios of the panelists

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### Call For Abstracts: General Contributed Paper and Poster Sessions

The Metropolitan New York Section of the MAA is soliciting abstracts for the *Contributed Paper and Poster Sessions* of its 2007 Spring Meeting to be held on Sunday, May 6 at Sarah Lawrence College in Bronxville (lower Westchester County). All interested professionals and students are encouraged to submit an abstract. Once again this year the Contributed Paper Sessions will feature presentations on mathematical research as well as mathematics education. We will also once again have a *Poster Session* at our meeting.

As always, high school and college students are especially encouraged to submit an abstract discussing their experience with mathematical research. To further encourage student participation at the Spring Meeting, the Metropolitan New York Section is pleased to waive the meeting registration fee and lunch fee and to provide a gratis 2007 MAA membership (including a journal subscription) for all student presenters! Teachers, please encourage your students to present!

Paper presentations will be of fifteen minutes in duration followed by a five minute question and answer period. All presenters will be recognized in the final program of the Spring Meeting.

In addition to the abstract (not to exceed 300 words), all proposals should include the name of the author(s) and presenter(s), postal address, e-mail address, phone number, and title of the proposed presentation. Please indicate any special equipment needs. High school and college student presenters should also submit the name and telephone number of their mathematics teacher or advisor.

Please submit proposals electronically, in plain text or MS Word format, to [alfare@ncc.edu](mailto:alfare@ncc.edu) by Monday, April 2 for full consideration. All abstracts will be examined by a committee of reviewers. The outcome of their deliberations will be announced by mid-April. Please be certain to clearly indicate your preference regarding presentation, i.e. if you are only interested in presenting a paper (15 minute lecture), or only wish to present a poster, or if you have no preference and would be willing to do either.

For additional information regarding the *Contributed Paper and Poster Sessions* of the 2007 Spring Meeting, please contact Emad Alfar ([alfare@ncc.edu](mailto:alfare@ncc.edu)).



## ***Sums of Squares and the 290-Theorem***, Manjul Bhargava, Princeton University

**Abstract:** The famous “Four Squares Theorem” of Lagrange asserts that any positive integer can be expressed as the sum of four square numbers. That is, the quadratic form  $a^2 + b^2 + c^2 + d^2$  “represents” all (positive) integers. When does a general quadratic form represent all integers? When does it represent all odd integers? When does it represent all primes? We show how all these questions turn out to have very simple and surprising answers. In particular, we describe the recent work (joint with Jonathan Hanke, Duke University) in proving Conway’s *290-Conjecture*.

**Speaker Biography:** Manjul Bhargava is a professor of mathematics at Princeton University and has research interests in algebraic number theory and representation theory. He graduated from Harvard University in 1996 and received his doctorate from Princeton in 2001. His highly acclaimed Ph.D. thesis, work conducted under Andrew Wiles, generalized the classical Gauss composition law for quadratic forms. Professor Bhargava has won numerous awards for his outstanding research including the SASTRA Ramanujan Prize, the Clay Research Award and the Frank and Brennie Morgan Prize. He was named one of *Popular Science* magazine’s *Brilliant 10* in 2002.

## ***Preference Sets, Graphs, and Voting in Agreeable Societies***

Francis Edward Su, Harvey Mudd College

**Abstract:** When mathematical objects have a social interpretation, the associated theorems have social applications. We give examples of situations where sets model preferences, and suggest extensions of classical theorems on convex sets which have applications to the analysis of voting in “agreeable” societies. This talk features research with undergraduates.

**Speaker Biography:** Francis Edward Su earned his Ph.D. from Harvard University, held visiting positions at Cornell and MSRI, and is now Professor of Mathematics at Harvey Mudd College. His research focuses on problems in topological and geometric combinatorics, especially those that have applications to the social sciences, and he has co-authored many papers with undergraduates. He has a passion for teaching and popularizing mathematics. In 2001 he received the Merten M. Hasse Prize from the MAA for expository writing, and in 2004 he received the MAA’s Henry L. Alder Award for distinguished teaching. Su serves on the editorial boards of *Math Horizons* and the *American Mathematical Monthly*, and is author of the popular *Math Fun Facts* website that receives 3,000 hits per day. For fun he enjoys songwriting, swing dancing, sports, and theological reflection.

## ***Panel: The Situation Today: Continuing Challenges for Girls and Women in Mathematics***

**Joan Birman** is a native New Yorker. She attended Swarthmore College and Barnard College of Columbia University as an undergraduate. She earned an M.S. in Physics from Columbia and worked for various companies that designed electronic equipment for aircraft before returning to school to pursue graduate studies at the Courant Institute of Mathematical Sciences at NYU. She received her Ph.D. from Courant with the dissertation *Braid Groups and Their Relationship to Mapping Class Groups*. After teaching for a few years at the Stevens Institute of Technology, Birman joined the faculty at Barnard College where she has been since 1973. Dr. Birman has received numerous honors and awards during her career including a Sloan Foundation Fellowship, a Guggenheim Fellowship, the New York City Mayor’s Award for Excellence in Science and Technology and the MAA’s Chauvenet Prize for expository writing. She is currently Research Professor Emeritus at Barnard.

**Ann Gallagher** is a Senior Research Scientist at the Law School Admission Council. Her main research interest is sources of group differences in test performance and problem solving. She received her Ed. D. in Educational Psychology from Rutgers University Graduate School of Education in 1991 and worked as a research scientist for 16 years at Educational Testing Service, conducting studies on issues related to standardized testing. She has published work in the *Journal of Educational Psychology*, *Journal of Educational Measurement*, *Journal of Experimental Child Psychology* and has recently co-edited a book (with James C. Kaufman) entitled, *Gender Differences in Mathematics: An Integrative Psychological Approach*.

**Abbe Herzig** (moderator) is an assistant professor of mathematics education at the University at Albany (SUNY). Her research concerns equity and social justice in mathematics and science education at all levels. She is at the beginning of a 6-year research program concerning women and students of color in the post-graduate mathematical sciences, and is also investigating the low numbers of students of color in undergraduate engineering. She has developed courses and programs to help diverse populations of young people discover the relevance of mathematics and science to their interests and realities. She worked for 12 years as a statistician, much of that time for Consumers Union, the publisher of Consumer Reports magazine. She has consulted for the United Nations, the Yale School of Medicine, Brookhaven National Laboratory, and the Legal Defense Fund of the NAACP.

**Directions to:**  
**SARAH LAWRENCE COLLEGE**  
**Heimbold Visual Arts Center**  
**Kimball Ave & Glen Washington Road**  
**Bronxville, NY 10708**



**Arriving by Train**

Metro-North Railroad Harlem Line commuter trains run hourly on weekends. Take the Harlem Line train from Grand Central Terminal to the Bronxville Station. Please call Metro-North at 800.METROGO (800-638-7646) or visit the Metro North website ([http://as0.mta.info/mnr/schedules/sched\\_form.cfm](http://as0.mta.info/mnr/schedules/sched_form.cfm)) for exact schedule and fare information. Purchase your round-trip tickets at the station to avoid an extra charge. At Grand Central consult with an agent behind the information desk to determine the specific track of the Harlem Line train leaving for Bronxville. Please note that not all Harlem Line trains stop at Bronxville.

Free shuttle service by van between the Bronxville Station and the meeting site will be available for meeting attendees arriving at Bronxville Station between 7:30 and 9:30AM and again for attendees departing campus between 3PM and 6PM. At Bronxville Station, look for a Sarah Lawrence College van as you step off the platform. (Taxi service is also available at the Bronxville Station for the short ride to the meeting site, ask for the new Heimbold Arts Building on Kimball Avenue. From the meeting site, members can call Bronxville Taxi at (914) 337-8311 to arrange for a pick-up.)

**Driving Directions**

Sarah Lawrence College is easily accessible via the parkways of Westchester County. However, if problems arise, feel free to call the College Operator at (914) 337-0700 for assistance.

**From West Side of Manhattan and the Bronx:**

Take the West Side Highway North to the Henry Hudson Parkway, which becomes the Saw Mill River Parkway. From the Saw Mill River Parkway, take exit #4 (Cross County Parkway East) and bear right at the fork in the road and take exit #5 (Kimball Ave.). At the traffic light take a left onto Kimball Ave. Go under the overpass to the 2nd traffic light and turn right onto Glen Washington Road. Make an immediate right into Andrews Lot for free parking (in any unrestricted parking spot). Meeting registration is located on the first floor of the Heimbold Arts Building located on the opposite side of Kimball Avenue (Building 37 on campus map). Look for special MAA meeting signs to guide you to registration.

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**From East Side of Manhattan and the Bronx:**

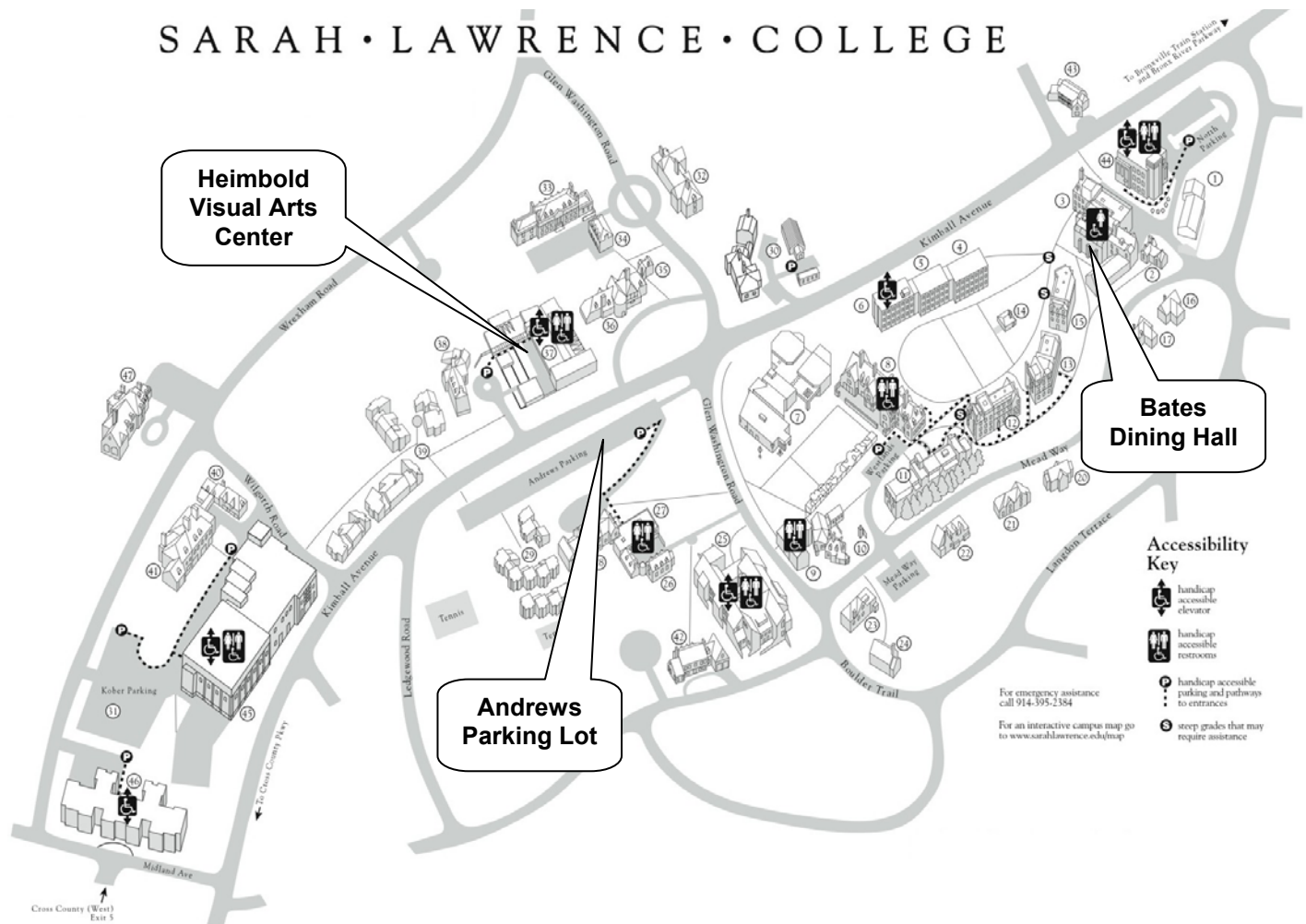
Take the FDR Dr./East River Dr. North to exit #18 (Willis Ave. Bridge). Go over the bridge, staying in the left lane. At the first traffic light, enter the Major Deegan Expressway/Interstate 87 North, which becomes the New York State Thruway/Interstate 87 North in Westchester County. Take exit #4 (Cross County Parkway East), bear right at the fork in the road, and take exit #5 (Kimball Ave.). At the traffic light, take a left onto Kimball Ave. Go under the overpass to the 2nd traffic light and turn right onto Glen Washington Road. Make an immediate right into Andrews Lot for free parking (in any unrestricted parking spot). Meeting registration is located on the first floor of the Heimbold Arts Building located on the opposite side of Kimball Avenue (Building 37 on campus map). Look for special MAA meeting signs to guide you to registration.

**From Long Island, Brooklyn and Queens:**

Take the Whitestone Bridge to the Hutchinson River Parkway North and get off at exit #13 (Cross County Parkway West). Take the Cross County Parkway West to exit #5 (Kimball Ave.) and make a right at the stop sign, which will bring you to a traffic light at Kimball Ave. Take a left. At the next traffic light, turn right onto Glen Washington Road. Make an immediate right into Andrews Lot for free parking (in any unrestricted parking spot). Meeting registration is located on the first floor of the Heimbold Arts Building located on the opposite side of Kimball Avenue (Building 37 on campus map). Look for special MAA meeting signs to guide you to registration.

**From Northern Westchester and Upstate New York:**

Take the Taconic State Parkway South, which becomes the Sprain Brook Parkway South. Exit the Sprain Brook Parkway at #11 West (Cross County Parkway West). Take exit #5 (Kimball Ave.) and make a right at the stop sign, which will bring you to the Kimball Ave. traffic light. Take a left at the Kimball Ave. traffic light. At the next traffic light, turn right onto Glen Washington Road. Make an immediate right into Andrews Lot for free parking (in any unrestricted parking spot). Meeting registration is located on the first floor of the Heimbold Arts Building located on the opposite side of Kimball Avenue (Building 37 on campus map). Look for special MAA meeting signs to guide you to registration.



# 2007 SECTION MEETING REGISTRATION FORM

(\*\* PLEASE PRINT \*\*)

First Name: \_\_\_\_\_ M.I.: \_\_\_\_\_ Last Name: \_\_\_\_\_

Badge Name or Nickname: \_\_\_\_\_ Affiliation: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip+4: \_\_\_\_\_ - \_\_\_\_\_

Phone Numbers: Day: (\_\_\_\_) \_\_\_\_\_ Eve: (\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_) \_\_\_\_\_

Internet address: E-mail: \_\_\_\_\_

Special diet? (circle one) Yes / No. Please specify: \_\_\_\_\_

Any other special needs? (wheelchair access, etc. – please specify) \_\_\_\_\_

How will you be arriving to the meeting?  Car  Metro North  Other

The MAA national office requests the following information. Please check the appropriate responses.

Current MAA Member:  Yes  No

First Time Attending a Metro NY Sectional Meeting?  Yes  No

High School Student  Undergraduate Student  Graduate Student

High School Teacher  2-Year College Faculty  4-Year College Faculty

University Faculty  Business/Industry/Government Employee

Other (please specify) \_\_\_\_\_  Retired (from?) \_\_\_\_\_

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Registration Fee: On/Before 13 April \$ 5.00 \_\_\_\_\_

After 13 April \$10.00 \_\_\_\_\_

Student Registration\* \$ 3.00 \_\_\_\_\_

Luncheon? (circle one) Yes / No \$15.00 \_\_\_\_\_

TOTAL: \_\_\_\_\_

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We seek donations for the silent auction we are planning during lunch. If you would like to make a donation, kindly specify the item(s) you would like to donate.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\* Registration and lunch fee waived for students presenting papers.

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**Copy** this form, since a map and directions to the meeting site are on the other side, and make payment with **check** made payable to *The MAA*. Do not send cash. **Mail** completed form with payment to:

Dan King  
Department of Mathematics  
Sarah Lawrence College  
1 Mead Way  
Bronxville, NY 10708

(Registration forms will be acknowledged via e-mail within two weeks of receipt.)

## FEATURED ARTICLE

### A New SIGMAA: Mathematics and the Arts

Anne Burns, Long Island University/C.W. Post Campus  
aburns@liu.edu • <http://myweb.cwpost.liu.edu/aburns/>

An exciting new event has occurred; in January a new SIGMAA (Special Interest Groups of the MAA) was born. It is abbreviated SIGMAA-ARTS; its purpose is to support and encourage the interests of MAA members in the connections between Mathematics and the Arts.

The first MAA session on Mathematics and the Arts at the Joint Meetings was held in Baltimore in 2002. The organizers were allotted the time slot in the afternoon of Saturday, the last day of the conference. Even so, the response was tremendous. There were talks on Islamic Art, quilting, group theory, tessellations, sculpture, soap bubbles, scientific visualization, fractal scenery and many other topics, and the people in the audience were riveted to their seats. Two years later at the joint meetings in Phoenix, the response to the organizers' call for abstracts was so huge that two entire sessions were devoted to Mathematics and the Arts and they played to overflow crowds. In 2006 another session was offered at the joint meetings in San Antonio and once again resulted in big audiences.

For the past several years a Math and Art Exhibit has been held at the Joint Meetings. As the word spread the number and quality of the submissions to the art exhibit increased greatly.

Many of the participants were also active in two other groups dedicated to the connections between math and art and knew each other from the yearly conferences held by those groups. The number of people interested in math and art has mushroomed over the past several years, so it seemed only natural that the next step was to form a SIGMAA. We met in New Orleans for the first time in January 2007; we had over 120 charter members and many more signed up.

We have a web site; go to [www.maa.org/SIGMAA](http://www.maa.org/SIGMAA) and click on the "ARTS" tab under the *Learn About the SIGMAA's* heading, or click on "ARTS" under the *SIGMAA Websites* heading. On the web site you will find links to all sorts of resources: links to the past Math-Art exhibits and announcements of future ones; it contains Art-Math news, links to other organizations that promote math and art, announcements of future conferences, ways to use art and math as a means of interesting students at all levels, and the announcement of a new peer-reviewed *Journal of Mathematics and the Arts* (JMA) published by Taylor and Francis which debuts this month. It also contains the charter and list of officers with email addresses.

Sessions and exhibits are being planned for the MathFest in August and for the Joint Meetings next year in San Diego. Take a look at our website and then join us!

Editors Note: While visiting the SIGMAA website ([www.maa.org/SIGMAA](http://www.maa.org/SIGMAA)), please investigate all the available groups. The current list is:

- RUME - Research in Undergraduate Mathematics Education
- BIG - Mathematicians in Business, Industry and Government
- STAT-ED - Statistics Education
- HOM - History of Mathematics
- POM - Philosophy of Mathematics
- EM - Environmental Mathematics
- QL - Quantitative Literacy
- WEB - Mathematics Instruction Using the Web
- TAHSM - Teaching Advanced High School Mathematics
- BIO - Mathematical and Computational Biology
- ARTS - Mathematics and the Arts



## NEWS FROM OUR SECTION

### **Synergy Happens: A Report of Our 2006 Meetings**

by Henry Ricardo, Medgar Evers College (CUNY)

When is the whole greater than the sum of its parts? Well, just look at the meetings our section held in 2006.

On Sunday, May 7, 2006, approximately 120 practitioners of the art and science of mathematics gathered at picturesque Dowling College in Oakdale, NY, for the Metro NY Section's annual spring meeting. We had a welcoming reception and a tasty luncheon later. We marveled at Art Benjamin's mathematical feats and enjoyed his lecture on "Counting on Determinants." Joe Gallian dazzled us with his talk on "Using Groups and Graphs to Create Symmetry Patterns." Luise-Charlotte Kappe gave a special presentation on the subject of maintaining research in the first few years of teaching. There was a panel discussion titled "Mathematicians Involved in School Mathematics," as well as a contributed papers session and poster presentations by students and professionals. We witnessed Farley Mawyer being presented with the section's 2006 Distinguished Teaching Award and Joe Malkevitch getting the 2006 Distinguished Service Award. Congratulations to Farley and Joe! (The acceptance speeches were admirably brief!) Last, but not least, there was a successful MAA Book Sale, providing a good selection of current books at prices below the usual discounted price for members, and several tables staffed by book vendors showing their latest texts. Pictures of the meeting are available via the Section webpage ([www.maa.org/metrony](http://www.maa.org/metrony)).

We enjoyed the experience so much that we couldn't wait for our 2007 meeting. So we held a joint meeting with the Seaway Section on October 13-14. The venue was Marist College in Poughkeepsie, and Joe Kirtland made sure that all 139 of us (90 from Seaway, 49 from Metro) enjoyed his beautiful, technology-rich campus overlooking the Hudson River. There was a Friday evening social hour and banquet, followed by Fred Rickey's interesting and informative presentation on the history of the trigonometric functions. (Guess which 300-year-old mathematician played a prominent role in this story?) Saturday morning brought us a talk on "Planar Linkages" by Nancy Hagelgans and William Velez's inspirational hints on "Increasing the Numbers of Mathematics Majors." After lunch, we heard William Zwicker's perceptive analysis of "The Mathematics of *Not* Voting," followed by a panel discussion of New York State's K-12 mathematics curriculum and a contributed paper session (including student presentations). Throughout, there was a display of books from several publishers and the usual sale of MAA books.

As we prepare for our annual spring meeting at Sarah Lawrence College on May 6, which you can read about in this *Newsletter*, we are also working on a joint meeting with the New Jersey Section on November 3, 2007. Stay tuned!

### **The AAAS Names a Metro NY Section Member a 2006 Fellow**

Each year the American Association for the Advancement of Science elects Fellows whose "efforts on behalf of the advancement of science or its applications are scientifically or socially distinguished." At its September 2006 meeting, the AAAS Council elected Warren Page as a Fellow of AAAS in the *Section on Mathematics*, one of only four to be selected. Dr. Page was cited for "excellence in expository writing in mathematics, significant service to the mathematics community, and an outstanding eighteen years of service to AAAS."

Warren Page is a Professor Emeritus of Mathematics at New York City College of Technology.

## **CALL FOR PARTICIPANTS AND INVOLVEMENT**

### **Long Island Math Fair: Call for Judges**

The Al Kalfus Long Island Math Fair wants you. Treat yourself; let the students lecture. Sit back and listen to papers written and presented by bright and interested high school students from Nassau and Suffolk counties. Judges are needed for the two first rounds and the final round. The Nassau first round will be held on Friday, March 23, 2007 at Hofstra University. The Suffolk first round will be held on Friday, March 16, 2007 at Half Hollow Hills HS (East & West). The final round is Friday, April 27, 2007 at Hofstra University. All rounds begin at 3:00 p.m. For more information, call Joseph Quartararo at (631) 584-2016 or check: [www.continentalmathleague.hostrack.com/info2007.pdf](http://www.continentalmathleague.hostrack.com/info2007.pdf).

### **Greater Metropolitan New York Math Fair: Call for Judges**

The fortieth Greater Metropolitan New York Math Fair will take place on April 22, 2007 and May 20, 2007 at Pace University in Manhattan. The MATH FAIR was created to encourage high school students in public, private and parochial schools in the New York Metropolitan Area to pursue a phase of mathematics in which they are interested. This pursuit takes the form of researching a topic and writing a paper on the subject. This paper is presented by the student to a panel of judges who have previously reviewed the papers. During Round 1 (April 22, 2007) the judges decide which contestants advance to Round 2 (May 20, 2007). Students not advancing receive a personalized Letter of Achievement. All students advancing to Round 2 receive a medal, either bronze, silver, or gold and a personalized Certificate of Merit. During the second round of judging the panel of judges studying a student paper and listening to the student presentation decides upon the medal that the student should receive.

The FAIR could not exist without the judges who volunteer their talents to encourage these young people in the study of mathematics. We would appreciate your judging in this year's Fair, either for Round 1, Round 2 or both. You will note that these sessions are both held on Sunday so as not to conflict with your other professional responsibilities. Judging usually starts between 12:30 and 1:00 P.M. but judges usually arrive between 11 A.M. and noon to discuss the papers with other judges on the same panel. Many judges also like to arrive early in order to socialize with other mathematicians who may be judging. For Round 1 there may be up to 100 Mathematicians judging.

Note, effective with the 40<sup>th</sup> Math Fair, in Spring 2007, all students papers will be submitted electronically. This means that Judges will be requested to electronically read the papers either via printing them or by downloading them to their computers.

A judge application can be found on the Section web-page ([www.maa.org/metrony](http://www.maa.org/metrony)). If you would like to judge in this year's FAIR fill in the application and return to Russell Jay Hendel at the address on the application. Feel free to duplicate the application and give copies to colleagues who might be interested in judging. New judges are always welcome. We appreciate your participation.

Please contact Russell Jay Hendel for further information – E-mail: [RHendel@Towson.Edu](mailto:RHendel@Towson.Edu).

### **Go Back to School, Join *The Mathematics Speakers Bureau!!!***

Do you have a talk which would be suitable for local area students or their faculty? We are seeking mathematicians interested in sharing their knowledge, enthusiasm, and love of mathematics. Now in its 48<sup>th</sup> year, the Mathematics Speakers Bureau (MSB) is composed of dedicated mathematicians who volunteer to speak to students and faculty of regional middle schools, high schools, colleges and universities on topics reaching beyond the traditional mathematics curriculum.

The primary goals of the MSB are to stimulate the interests of local youth in mathematics, to provide opportunities for students to meet active and enthusiastic mathematicians, to motivate students towards

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careers in the mathematical sciences, and to encourage cooperation between corporate and academic institutions in the mathematical education of area youth. Volunteers provide information about talks they are willing to give and the Bureau, in turn, advertises these talks to the faculty of local area schools. Schools contact speaker volunteers directly to make specific arrangements for a visit. Volunteers determine the number of presentations they give in any given academic year and always maintain the right to decline any invitation to speak. The Bureau web-page ([www.maa.org/metrony/speakers](http://www.maa.org/metrony/speakers)) contains an up-to-date listing of available speakers and their proposed talks. Additional information regarding the goals, history and operation of the Bureau can also be found at this site. If you wish to volunteer with the MSB, please contact Bureau Chair Abe Mantell at [mantell@ncc.edu](mailto:mantell@ncc.edu).

### ***Math for America: \$90,000 Teaching Fellowships Available***

The Newton Fellowship Program focuses on the shortage of adequately qualified mathematics teachers in our nation's public secondary schools. The Newton Fellowship Program trains mathematically-talented individuals to become secondary school math teachers and supports them in the early years of their careers. The program currently operates in New York City and is endorsed by the New York City Department of Education. MfA will appoint over 340 Newton Fellows in NYC between 2004 and 2011. MfA expects to expand the program to other cities in the future.

The Benefits of Becoming a Newton Fellow

- Receive an aggregate stipend of \$90,000 over five years
- Obtain a full tuition scholarship to master's level teacher preparation program at Bard College, New York University, or Teachers College/Columbia University
- Achieve a position as a secondary school math teacher in New York City
- Earn New York State Teaching Certification and New York City teacher's salary
- Develop your classroom skills through MfA's mentoring, coaching, and support services
- Build a life-long career through professional development activities
- Become a part of a group of outstanding math teachers

Details can be found on [www.mathforamerica.org](http://www.mathforamerica.org).

### **Undergraduate Mathematics Research Opportunity through CURM**

There is a new opportunity for undergraduate research through the Center for Undergraduate Research (CURM) at BYU. CURM promotes undergraduate research in mathematics throughout the United States by: (1) training professors as mentors for undergraduate research projects; (2) providing funds to professors to establish undergraduate student research groups at their own institution during the academic year; (3) advising professors on how to organize and continue to operate undergraduate research groups at their own institution; and (4) preparing undergraduate students to succeed in graduate studies in mathematics.

To help achieve these objectives, CURM awards mini-grants each year to professors at various institutions across the United States to assist them financially, instructionally, and organizationally in operating successful undergraduate research groups at their own institutions. Basically, the setup is that we give out 12-15 mini-grants to mathematics faculty members at other institutions to setup a small undergraduate research group at their own institution consisting of 2-4 undergraduates and 1 faculty mentor. The grants would provide \$3000/year stipend for each student who would commit to work about 10/week on the research project and \$5000/year for the faculty mentor to buy out a teaching course so that he/she could spend the "bought out" time to work with the undergraduate research group. In addition there would be funds for supplies and funds to travel to a conference at which the undergraduates would present their research. The deadline for applications is March 15.

We have a special emphasis on targeting women and participants from undergraduate institutions (i.e., institutions that do not offer PhD's in mathematics). CURM is funded by BYU and a grant from NSF. More information is available at the CURM website [curm.byu.edu](http://curm.byu.edu). Questions may be directed to: Michael Dorff, Department of Mathematics Brigham Young University, Provo, Utah 84602, [mdorff@math.byu.edu](mailto:mdorff@math.byu.edu), (801) 422-1752.

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## **Call For Abstracts: General Contributed Paper and Poster Sessions**

The Metropolitan New York Section of the MAA is soliciting abstracts for the *Contributed Paper and Poster Sessions* of its 2007 Spring Meeting to be held on Sunday, May 6 at Sarah Lawrence College. All interested professionals and students are encouraged to submit an abstract. Once again this year the *Contributed Paper Sessions* will feature presentations on mathematical research as well as mathematics education. See page 8 for the particulars.

## **Call for Student Speakers! – Spuyten Duyvil Undergraduate Math Conference**

Last March, approximately 130 undergraduates, faculty, and friends attended the first annual *Spuyten Duyvil Undergraduate Mathematics Conference* at Manhattan College.

The purpose of the conference is to give undergraduates the opportunity to discuss mathematics with their peers, and twenty four undergraduates and an additional eight faculty members made presentations, and the keynote speaker, Dr Fred Rickey gave an engaging talk on the Bernoulli brothers. Four alumni led a panel discussion on careers in Mathematics, and a good time was had by everyone.

Student presentations ranged from topics of general interest to presentations of undergraduate research projects. For example, there was a presentation of the use of perspective to create optical illusions in art; a talk on the knight's tour problem when the game of chess is played on an unusual topological surface; and a talk on the use of operations research to find the most efficient method of deploying army chaplains.

The 2<sup>nd</sup> *Spuyten Duyvil Undergraduate Mathematics Conference* will take place at the College of Mount Saint Vincent, on Saturday April 14, 2007. We again invite undergraduates to submit an abstract for a presentation. Talks are 15 minutes long, followed by a five minute period for questions.

Faculty who are interested in making a presentation which would be of particular interest to undergraduates or one which provides background for a presentation by an advisee may also submit an abstract. However, this is not a venue for presentations of faculty research!

Our 2007 keynote speaker will be Dr. Peter Winkler, of Dartmouth College. Dr. Winkler's research interests lie in Probability Theory, Combinatorics and Computer Science, while his hobbies include mathematical games and ragtime composition. The title of his keynote is *What Can We Learn from Mathematical Puzzles?* In addition to student presentations and the keynote address, there will be a panel on careers in mathematics.

Registration is free. The conference will begin at 8:30 am, and will end around 4 pm. A light lunch will be provided. The deadline for submission of abstracts is March 15, 2007. Abstracts may be submitted at [home.manhattan.edu/~joan.harnett/sdumc](http://home.manhattan.edu/~joan.harnett/sdumc), and all attendees should pre-register to insure enough lunch!

Please encourage your students and colleagues to attend the conference, and to consider making a presentation! For more information contact [Kathryn.weld@manhattan.edu](mailto:Kathryn.weld@manhattan.edu).

The conference is funded in part by an MAA NSF-RUMC grant, DMS 536991.

## ***MetroMATH* Needs You!!!**

Consider submitting a short announcement, commentary, article, study, experience, or other news-worthy item in the next issue of *MetroMath*. Contact the editor, Abe Mantell, via e-mail: [mantell@ncc.edu](mailto:mantell@ncc.edu).

## EVENTS CALENDAR

### **AI Kalfus Long Island Math Fair 2007**

March 16, Friday, (Round 1 – Suffolk County) Half Hollow Hills HS (East & West)  
March 23, Friday, (Round 1 – Nassau County) Hofstra University  
April 27, Friday, (Final Round) Hofstra University  
All rounds begin at 3:00 PM. Grade Levels are 7-12 for math and 10-12 for computers.  
For more information, call Joseph Quartararo at (631) 584-2016.

### **NCTM Annual Meeting and Exposition • March 21-24, 2007, Atlanta, GA**

For more information visit: [www.nctm.org/meetings/atlanta/](http://www.nctm.org/meetings/atlanta/)

### **Mathematics: History and Connections • March 23-24, 2007, Suffolk County CC, Selden, NY**

For more information visit: [www2.sunysuffolk.edu/wrightj/CID/](http://www2.sunysuffolk.edu/wrightj/CID/)

### **MAA New Jersey Section Spring Meeting**

March 31, 2007, Rowan University, Glassboro, NJ  
For more information visit: [www.maa.org/newjersey](http://www.maa.org/newjersey)

### **Spuyten Duyvil Undergraduate Mathematics Conference • April 14, 2007**

College of Mount Saint Vincent, Riverdale, NY  
For more information visit: [home.manhattan.edu/~joan.harnett/sdumc](http://home.manhattan.edu/~joan.harnett/sdumc)

### **AMS Eastern Section Spring Meeting**

April 14-15, 2007, Stevens Institute of Technology, Hoboken, NJ  
For more information visit: [www.ams.org/amsmtgs/2140\\_program.html](http://www.ams.org/amsmtgs/2140_program.html)

### **ATMNYC Mini-Conferences • Two Locations - Two Dates**

Texas Instruments Workshops – 1. Elementary or 2. Middle/High School Level  
April 18, 2007, College of Mt. Saint Vincent, Riverdale, NY  
May 10, 2007, Nathaniel Hawthorne Middle School, Bayside, NY  
For more information visit: [www.atmnyc.org/2007miniconf.html](http://www.atmnyc.org/2007miniconf.html)

### **NYSMATYC Annual Conference • April 20-22, 2007, Crowne Plaza Hotel, Niagara Falls, NY**

For more information visit: [www.nysmatyc.org/conf2007](http://www.nysmatyc.org/conf2007)

### **Hudson River Undergraduate Mathematics Conference XIV**

April 21, 2007, Siena College, Loudonville, NY  
For more information visit: [www.skidmore.edu/academics/mcs/pages/hrumc14in.htm](http://www.skidmore.edu/academics/mcs/pages/hrumc14in.htm)

### **Greater Metropolitan New York Math Fair 2007**

April 22, Sunday, (Round 1) Pace University in Manhattan  
May 20, Sunday, (Round 2) Pace University in Manhattan  
For more information contact Russell Jay Hendel at [RHendel@Towson.Edu](mailto:RHendel@Towson.Edu)  
or check the section web-page for more info and the judging request form.

### **MAA Seaway Section Spring Meeting • April 27-28, 2007, SUNY Oneonta, Oneonta, NY**

For more information visit: [www.maa.org/seaway](http://www.maa.org/seaway)

### **Metropolitan New York Section Meeting • May 6, 2007, Sarah Lawrence College, Bronxville, NY**

For more information see this newsletter, or visit: [www.maa.org/metrony](http://www.maa.org/metrony)

### **3<sup>rd</sup> Cornell Probability Summer School • June 17-30, 2007, Cornell University, Ithaca, NY**

For more information visit: [www.math.cornell.edu/~durrett/CPSS2007/](http://www.math.cornell.edu/~durrett/CPSS2007/)

### **ICIAM – 6<sup>th</sup> International Congress on Industrial and Applied Mathematics**

July 16-20, 2007, Zurich, Switzerland. For more information visit: [www.iciam07.ch](http://www.iciam07.ch)

### **MathFest August 3-5, 2007, San Jose, CA • For more information visit: [www.maa.org/mathfest](http://www.maa.org/mathfest)**

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**AMS Eastern Section Fall Meeting • October 6-7, 2007**

Rutgers University-New Brunswick, Busch Campus, New Brunswick, NJ  
For more information visit: [www.ams.org/amsmtg/2151\\_program.html](http://www.ams.org/amsmtg/2151_program.html)

**AMATYC Annual Conference • November 1-4, 2007, Minneapolis, MN**

For more information visit: [www.amatyc.org/Events/conferences/2007/index.html](http://www.amatyc.org/Events/conferences/2007/index.html)

**Joint Meeting of the Metro NY and New Jersey Sections of the MAA**

November 3, 2007, Saint Peter's College, Jersey City, NJ  
Information will be posted as it becomes available: [www.maa.org/metrony](http://www.maa.org/metrony)

**ATMNYC'S 2007 Fall Conference • November 17, 2007, Hunter College, New York, NY**

For more information visit: [www.atmnyc.org/2007fallconf.html](http://www.atmnyc.org/2007fallconf.html)

**MAA-AMS Joint Mathematics Meeting • January 6-9, 2008**

San Diego Convention Center, San Diego, CA  
For more information visit: [www.ams.org/amsmtg/national.html](http://www.ams.org/amsmtg/national.html)

**AMS Eastern Section Spring Meeting**

March 15-16, 2008, Courant Institute of NYU, New York, NY  
For more information visit: [www.ams.org/amsmtg/2149\\_program.html](http://www.ams.org/amsmtg/2149_program.html)

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## NEWS FROM THE MAA

(much more can be found at: <http://www.maa.org/news/news.html>)

### Paul Halmos: A Life in Mathematics

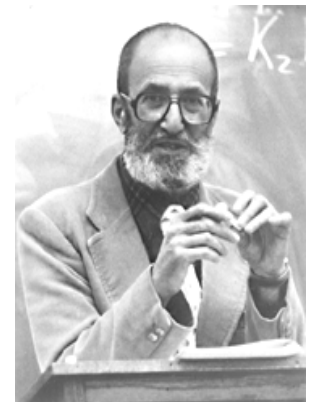
Paul R. Halmos (1916-2006), a major figure in twentieth century mathematics, died on October 2 in Los Gatos, California. Of Hungarian descent, he came to the United States at age 13. He entered the University of Illinois at 16, and received his doctorate when he was 22. Upon receiving his PhD he spent two years at the Institute for Advanced Study as an assistant to John von Neumann. Over the course of his career he held positions at the University of Chicago, University of Michigan, Indiana University, the University of California, Santa Barbara, the University of Hawaii, and Santa Clara University.

Professor Halmos was a famed author, editor, teacher, and speaker of distinction. Nearly all of his many books are still in print. His *Finite Dimensional Vector Spaces*, *Naive Set Theory*, *Measure Theory*, *Problems for Mathematicians Young and Old*, and *I Want to be a Mathematician* are classic books that reflect his clarity, conciseness, and color. He edited the *American Mathematical Monthly* from 1981-1985, and served for many years as one of the editors of the Springer-Verlag series *Undergraduate Texts in Mathematics* and *Graduate Texts in Mathematics*.

Halmos was thoroughly dedicated to mathematics, and he loved communicating it to others. He was recognized for his success as an expositor, and received several writing awards. He also was a noted teacher, winning the prestigious MAA Award for Distinguished College or University Teaching of Mathematics.

He was especially clever in choosing provocative titles for the articles he wrote – “Applied Mathematics is Bad Mathematics,” “The Thrills of Abstraction,” “American Mathematics from 1940 to the Day Before Yesterday.”

When interviewed several years ago, he was asked: What is mathematics to you? He responded: “It is security. Certainty. Truth. Beauty. Insight. Structure. Architecture. I see mathematics, the part of human knowledge that I call mathematics, as one thing — one great, glorious thing.” A few years later, he was asked about the best part of being a mathematician. He said: “I’m not a religious man, but it’s almost like being in touch with God when you’re thinking about mathematics.”



(continued)

Paul was also a great friend of the MAA. Several years ago, Paul and his wife Virginia made a very sizable donation to the MAA for the reconstruction of our Carriage House in Washington, DC, as a meeting center. That project is just now reaching completion, and already mathematics events are being held there. We at the MAA hope that this wonderful facility will be a fitting tribute to Paul and his mathematical interests.

Married in 1945, he is survived by his wife Virginia.

### **Search Begins for New Editor for Math Horizons**

The MAA is searching for a new Editor for Math Horizons, the MAA student magazine. The ideal candidate will have a wide-ranging interest in mathematics, as well as its culture, history, institutions and people. She or he will also need to be an excellent expositor, a painstaking editor, and a careful manager. An application consists of a curriculum vitae, a letter of interest outlining a vision for Math Horizons, and the names and contact information of three references willing and able to answer questions from the Search Committee about the applicant's writing, editing, and organizational skills. Joint applications from prospective editorial teams are welcome. Review of applications will begin on March 15, 2007 with appointment as Editor-elect to commence on January 1, 2008. The five-year editorial term runs January 1, 2009 through December 31, 2013. Some support, largely in the form of release time, is available. Send inquiries and applications to Steve Kennedy, Department of Mathematics, Carleton College, Northfield, MN 55057 (skennedy@carleton.edu).

### **College Mathematics Journal Editor Search**

The Mathematical Association of America (MAA) seeks to identify candidates to succeed Lowell Beineke as Editor of the College Mathematics Journal when his term expires in December 2008. Applicants should submit a resume, names of three references, and a statement of interest containing their ideas about the journal. Review of applications will begin on March 15, 2007 with appointment as Editor-elect to commence on January 1, 2008. The five-year editorial term runs January 1, 2009 through December 31, 2013. Some support, largely in the form of release time and a part-time editorial assistant, is available. Nominations are also welcome. Send inquiries and applications to Arthur Benjamin, Department of Mathematics, Harvey Mudd College, Claremont, CA 91711 (benjamin@hmc.edu).

### **Fields Medals and Other Awards at the 2006 International Congress of Mathematicians**

Four Fields Medals were awarded on August 22, the opening day of the 2006 International Congress of Mathematicians. The winners are Andrei Okounkov (Princeton), Grigori Perelman, Terence Tao (UCLA), and Wendelin Werner (University of Paris-Sud in Orsay). The Nevanlinna Prize for contributions to mathematical information theory was awarded to Jon Kleinberg (Cornell). A new prize for contributions to applied mathematics, named for Gauss, went to Kiyoshi Itô (retired). For brief bios of each award recipient, check: <http://www.maa.org/news/220806Fields.html>.

### **Slocum Puzzle Collection at the Lilly Library**

Jerry Slocum, who has been collecting and studying puzzles for over fifty years, has announced that he will donate his collection of 30,000 puzzles and 4,000 books about puzzles to the Lilly Library (<http://www.indiana.edu/~liblilly/>) at Indiana University. The library opened the Slocum Puzzle Room (<http://www.indiana.edu/~liblilly/calendar.shtml#puzzles>) on August 3, 2006. About 400 puzzles will be on display, most of them mechanical puzzles such as Chinese Rings and Rubik's Cube. Visitors to the library will be able to test their wits by attempting to solve the puzzles.

An article on the exhibit, including photos of several puzzles, appeared in the July 25, 2006 issue of the *New York Times*. It describes Slocum as "a retired engineer and a former vice president of Hughes Aircraft," who is also "the author of 10 books on the history of puzzles, including a recently published account of the sudoku-like 15 Puzzle." (We beg to differ about the supposed similarity between the 15 Puzzle and Sudoku!) The book, which is co-authored with Dic Sonneveld, has just been reviewed in our *Read This!* (<http://www.maa.org/reviews/>) column.

(continued)

## Searchable Putnam Career Path Web Site

A new web site has been created for the purpose of providing a searchable data base for information about Putnam Fellows (the top five finishers in the Putnam Competition). The goal is to give the year of the competition, the home institution, the school from which the Fellow received a Ph.D degree, professional positions, and awards and honors for each Putnam Fellow . Of the 252 people who have been Putnam Fellows, the web site has PhD information about 164. The top six schools where Putnam Fellows have obtained a PhD are: Harvard (48), Princeton (35), Berkeley (21), MIT (19), Chicago (8), Stanford (8). The web address is <http://www.d.umn.edu/~jgallian/putnamfel/PF.html>. Users are invited to submit additional information about Putnam Fellows online.

### **Teaching Time Savers: A series of articles edited by Michael E. Orrison**

*Teaching Time Savers* are articles designed to share easy-to-implement activities for streamlining the day-to-day tasks of faculty members everywhere. If you would like to share your favorite time savers with the readers of FOCUS, then send a separate e-mail description of each activity to Michael Orrison at [orrison@hmc.edu](mailto:orrison@hmc.edu). Make sure to include a comment on "time spent" and "time saved" for each activity, and to include pictures and/or figures if at all possible. The list of articles presently available are: *Is Homework Grading on Your Nerves?*, *Some Advice on Giving Advice*, *Style Points*, *A Recommendation for Recommendations* all by Michael E. Orrison, and *Reviewing Homework*, by Jane Murphy Wilburne. Please visit [www.maa.org/features/TeachingTimeSavers.html](http://www.maa.org/features/TeachingTimeSavers.html) to access them.

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### ***I Believe in Arithmetic (Part I), © 2007***

by Seymour W. Pustilnik ([seemorew@earthlink.net](mailto:seemorew@earthlink.net))

I believe in arithmetic  
it is a most marvelous subject  
you add, you multiply and you think  
yes, you just put a number on things  
and you know what the world is really like  
you add, you multiply, you think and now the way is clear  
for step one you add the numbers one to nine  
you master this two at a time and you will be just fine  
in step one we need an explanation  
as a sample and illustration  
we take two berries and add to them four berries  
this gives us just six berries  
but this only gives us one sample  
here we certainly need a second sample  
so now we take two apples add to them four apples getting six  
and thus we can say 2 things added to 4 things give us 6 things  
but we need a shorter way for this to say otherwise it will take all day  
so we write  $2+4=6$  or say 2 plus 4 is equal to or just the same as 6  
now we take much time to practice  
we add 2 to each of the numbers 1 to 9  
using such samples as examples  
then after a time we are fine  
do this with each of the other single digits for a while  
so this we finish with step one and can smile  
the next thing to do is step two  
here what you will try is to multiply  
you multiply the numbers one to nine  
this for you is something to do  
and we will talk again another time

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**SUNDAY, 6 MAY 2007**  
Sarah Lawrence College  
Bronxville (south Westchester), NY

**INVITED SPEAKERS**

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*Sums of Squares and the 290-Theorem*

**Francis Edward Su, Harvey Mudd College**  
*Preference Sets, Graphs, and Voting in Agreeable Societies*

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**Spring Meeting**

**Sarah Lawrence College**

**Sunday, 6 May 2007**

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Abe Mantell, Editor

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