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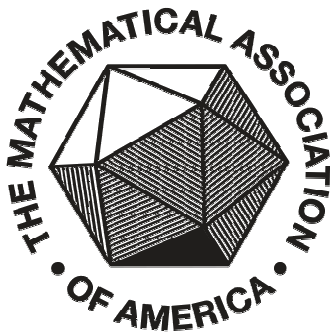
Newsletter

Metropolitan New York Section of
The Mathematical Association of America

March 2011



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Bronx	**Brooklyn**	**Columbia**	**Dutchess**
Greene	**Manhattan**	**Nassau**	**Orange**
Putnam	**Queens**	**Richmond**	**Rockland**
Suffolk	**Sullivan**	**Ulster**	**Westchester**

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ANNUAL MEETING

Sunday, 1 May 2011
8:45 AM – 5:00 PM

Stony Brook University (SUNY)
Simons Center for Geometry and Physics
Stony Brook, NY

(*More Information Contained Within*)

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SECTION OFFICERS

Section Governor (2008 – 2011)	**Henry Ricardo** Medgar Evers College (CUNY)	(845) 365-0117 henry@mec.cuny.edu
Chair (2009 – 2012)	**Farley Mawyer** York College (CUNY)	(718) 262-2939 fmawyer@york.cuny.edu
Chair-Elect (2009 – 2012)	**Jerry G. Ianni** LaGuardia Community College (CUNY)	(718) 482-5739 iannije@lagcc.cuny.edu
Secretary (2009 – 2012)	**Emad Alfar** Nassau Community College (CUNY)	(516) 572-7268 Emad.Alfar@ncc.edu
Treasurer (2009 – 2012)	**Mohammad Javadi** Nassau Community College (SUNY)	(516) 572-7972 javadim@ncc.edu
Vice-Chair for Four-Year Colleges (2009 – 2012)	**Elena Goloubeva** Webb Institute	(516) 671-2215 x111 egoloubeva@gmail.com
Vice-Chair for Two-Year Colleges (2009 – 2012)	**Janet Liou-Mark** NYC College of Technology (CUNY)	(718) 260-5929 jliou-mark@citytech.cuny.edu
Vice-Chair for High Schools (2009 – 2012)	**Nathaniel Silver** Brooklyn Technical High School	(718) 824-5099 mathelp@worldnet.att.net
Math Fair Chair – NYC	**Randy J. Asher** Brooklyn Technical High School	(718) 804–6500 rasher@schools.nyc.gov
Math Fair Chair – Long Island	**Joseph Quartararo** Northport-East Northport Public Schools	(631) 584-2016 cmleague@optonline.net
Speakers Bureau Chair	**Abraham S. Mantell** Nassau Community College (SUNY)	(516) 572-8092 mantell@ncc.edu
Newsletter Editor	**Abraham S. Mantell** Nassau Community College (SUNY)	(516) 572-8092 mantell@ncc.edu
Student Chapter Coordinator	**David Seppala-Holtzman** St. Joseph's College	(718) 636-7254 dholtzman@sjcny.edu
Public Relations Chair	**David Seppala-Holtzman** St. Joseph's College	(718) 636-7254 dholtzman@sjcny.edu
Book Exhibit Coordinator	**Henry Ricardo** Medgar Evers College (CUNY)	(845) 365-0117 henry@mec.cuny.edu
Liaison Coordinator and Webmaster	**Raymond N. Greenwell** Hofstra University	(516) 463-5573 matrng@hofstra.edu

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Section Web Page – sections.maa.org/metrony

The website for the Metropolitan New York Section of the MAA has moved to a new location at http://sections.maa.org/metrony/. Please change your bookmarks. The website has been hosted by Hofstra University for many years, and is now hosted by the MAA. The old website is no longer in operation. If you encounter any problems with the website, please contact the webmaster, Raymond N. Greenwell, at matrng@hofstra.edu.

National Web Page – www.maa.org (both sites are linked to each other)

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0.693147180559945309417232121458176568075500134360255254120680009493393621969694715605863326996418687542001481020570685733685520235758130557032670751635075961930727570828371435190307038623891673471123 35

Metropolitan New York Section of the MAA

Membership Count: 917 as of 15 February 2011

MESSAGE FROM THE SECTION CHAIR

As I write this, it is just over halfway through winter and the Yankees and Mets are starting their workouts. That must mean that it is time for you to make your plans to come to our Spring Meeting at the State University of New York at Stony Brook on Sunday, May 1. As usual we have arranged to have terrific speakers to address us. This year we have Aparna Higgins and Peter Winkler. (Abstracts may be found elsewhere in this issue.) We will have a presentation by Hank Kepner, former leader of NCTM, on Common Core Standards in mathematics education as well as a workshop and contributed paper sessions. Please check our website at http://sections.maa.org/metrony/ for updates. (The web page has changed over the past few months so please take a look.)

On a sad note, I mention the passing of Bernard Sohmer. Some of you may have been to the memorial service at CCNY on February 13. I first met Bernie in 1969 when he was a dean at CCNY. I got the chance to know him better when I first became active in the Metropolitan New York Section of the MAA in 1984. A true renaissance man, he was a leader in so many areas. Every time I find myself in charge of something I wonder how Bernie managed to do everything so very well. To name just some of his responsibilities he was chair of the CCNY Faculty Senate for 10 years, chair of the CCNY chapter of the Professional Staff Congress (union), was on the executive board of the PSC and the University Faculty Senate and UFS chair for 4 years. I got to work with him closely when he was our section chair and I was the section secretary. Last year, although he was quite ill, he continued to be of service to the section as part of the committee which chose our section's winner of the National Distinguished service award. I'm sure that Bernie will be missed by many people in many areas. Contributions to a memorial fund set up by the CUNY Chancellor in his honor may be made online at http://www1.ccny.cuny.edu/advancement/development/gift-online.cfm and clicking on Bernard Sohmer Scholarship when prompted to select a fund. More information can be obtained from rweiss@ccny.cuny.edu or by calling (212) 650-7178.

Farley Mawyer
York College (CUNY)

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MESSAGE FROM THE SECTION CHAIR-ELECT

During our Section's Annual Meeting at New York City College of Technology last May, more than 50 students from 5 different institutions either presented or co-presented a paper or a poster. It is really exciting to witness this level of activity! Behind the efforts of the student presenters, there is always the support of student peers and the guiding hand of dedicated advisors, professors, and other researchers. Thus, the number of actual participants in the exchange of ideas is far greater than those in attendance at the Annual Meeting. I urge all of you to continue your mathematical efforts and to help maintain and further develop the vibrancy within our Section.

Take advantage of some of the opportunities that our organization provides for active involvement in the community. Consider writing a news article about mathematical happenings in your institution, or consider organizing a special event on Pi day (March 14) or during Mathematical Awareness Month in April. Participate in a national conference such as MathFest this August, or enroll in one of the many Professional Enhancement Programs (PREP) of the MAA. As you engage in these activities, please realize that your imprint is felt by all of your colleagues in the Association. The MAA thrives on broad-based involvement from its members.

So, be an active member! The team of officers within the Metropolitan New York Section continues to look forward to interacting with you and to offering platforms for productive mathematical encounters.

Jerry G. Ianni
Fiorello H. LaGuardia Community College (CUNY)

MESSAGE FROM THE SECTION GOVERNOR

The Board of Governors (BoG) convened in New Orleans on Wednesday, January 5, just before the Joint Mathematics Meetings (JMM) began. There are still some areas of the Big Easy that have not recovered from Katrina's ravages, but the French Quarter, the Garden District, and some other tourist areas seem to be doing well.

A French Quarter photo op I couldn't resist.

There was a 112-page agenda at the BoG meeting, with all the issues, motions, and reports spelled out in detail. Some highlights follow.

The search for a new Executive Director to replace Tina Straley is underway. John Kenelly will be finishing his term as Treasurer at the end of 2011, and the Executive Committee is currently assembling a search committee to find his successor. John and the rest of the financial team have done a splendid job of preserving and strengthening the MAA's financial stability. Fernando Q. Gouvêa has been formally named Editor of *MAA Reviews*. I add that Joe Gallian, a former MAA president and a speaker at a recent Metro NY section meeting, underwent a triple bypass operation on Dec. 15. He is doing well and expects to attend *MathFest* in August.

The Board approved a $2 raise in dues for all membership categories over $100 and a $1 raise for those dues currently under $100—a very modest attempt to move the operating budget toward the black while still respecting the fact that many members are experiencing salary freezes. There have been many cuts in the MAA budget affecting all operations, including staff salary and benefits, governance expenses, programs, publications, and IT. However, overall, MAA remains in good financial health.

MAA periodicals and communications are evolving in various ways (see, for example, *Focus*). The MAA's bylaw requiring all members to subscribe to a journal is being reviewed. The first ebooks from the MAA have appeared: *Calculus: An Active Approach with Projects* by Stephen Hilbert *et al*. and *The Beauty of Fractals* by Denny Gulick and Jon Scott. There is an option for hardcopy versions of these.

The decline of MAA membership is an ongoing concern and various aspects of the problem, ranging from membership categories and dues (for example, a discounted membership for high school teachers) to social networking opportunities are being examined carefully. We should proselytize, especially encouraging our newer, younger colleagues to value membership. All of us should access www.maa.org regularly to enjoy and use the wealth of information contained therein.

Joe Malkevitch

The JMM registration figure hit a new high of 6032 and a record number of papers were presented. You can see a slide show and other information about the JMM at http://www.maa.org/meetings/jmm2011.html.

Our valued Metro NY colleague, Joe Malkevitch, received his Certificate for Meritorious Service from the national organization.

This is my last report as Governor. I am celebrating my 50th year of membership (a span greater than half the MAA's existence!). I thank the members of the Metro NY Section for giving me the opportunity to serve them and to become involved in the inner workings of an organization that has meant so much to me. There is no funny little man behind a curtain—just a relatively small number of people who are devoted to collegiate mathematics and who are doing a terrific job of providing services and resources to all of us.

When you receive your gubernatorial ballot, please vote. I look forward to seeing you at our Spring Meeting on Sunday, May 1 at Stony Brook University.

Henry Ricardo, Medgar Evers College (CUNY)

TREASURER'S REPORT

(as of 2/28/11)

Business Checking	$ 9,948.86
Business Money Market	$ 2,270.37
6-Month Business CD	$ 20,696.30
Total	$ 32,915.53

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

Mohammad Javadi, Nassau Community College (SUNY)

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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, the 50 year members free registration *and* lunch (who said there's no such thing as a *free lunch*?!!). ☺

25 Years: Gordon Crandall (LaGuardia CC - CUNY), David F. Doster, Benjamin Frisch (Friends Seminary), Joy Hsiao, John W. Kennedy (Queens College - CUNY), Aileen Michaels (Hofstra University), Dean C. Nataro (Nassau CC - SUNY), Robert A. Russell, Dexter Senft, Eric K. Wepsic, Jane-Marie Wright (Suffolk CCC - SUNY).

50 Years: Herbert J. Bernstein, Daniel I. A. Cohen (Hunter College - CUNY), Ira Ewen, Gerald Freilich (Queens College - CUNY), Leon Gleiberman (Touro College), Heinrich W. Guggenheimer, Stanley Kertzner (Hofstra University), Leonard P. Lewis, Morton Lowengrub (Yeshiva University), William J. McKeough (Hofstra University), Henry Ricardo (Medgar Evers College - CUNY), Loius V. Quintas (Pace University), Victor A. Stanionis (Iona College), John P. Tucciarone, Peter J. Weinberger, Lawrence J. Zimmerman, Paul R. Zuckerman (SUNY - New Paltz).

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2011 SPRING MEETING PROGRAM (Preliminary)
Sunday, May 1 • Stony Brook University (SUNY)
Simons Center for Geometry and Physics, Stony Brook, NY

8:45 – 9:30 AM	Registration and Refreshments Book Exhibits Open (continuing until 3:30 PM)
9:30 – 9:45 AM	Welcoming Remarks: Brent Lindquist, Deputy Provost, Stony Brook University Farley Mawyer, MAA Metropolitan New York Section Chair
9:45 – 10:45 AM	Invited Speaker: *Demonic Graphs and Undergraduate Research*[1] Aparna Higgins, University of Dayton
10:45 – 11:00 AM	Break - coffee and refreshments
11:00 – 12:00 PM	Invited Speaker: *Puzzles You Think You Must Not Have Heard Correctly* Peter Winkler, Dartmouth College[2]
12:15 – 1:15 PM	Lunch (with time to visit the exhibits)
1:15 – 1:45 PM	Awards Ceremony - including Prize Raffle with some Sectional Business
2:00 – 3:00 PM	*Common Core Standards*, Henry Kepner[3], University of Wisconsin - Milwaukee
2:00 – 4:00 PM	*WeBWork Workshop* Florin Catrina[4], St. John's University and Ethan Pribble[4], SUNY - Old Westbury
3:00 – 5:00 PM	Contributed Paper and Poster Sessions[5]

[1] See pages 7-8 for Abstract and brief Bio of Aparna Higgins
[2] See page 8 for Abstract and brief Bio Peter Winkler
[3] See page 9 for Abstract and brief Bio of Henry Kepner
[4] See page 9 for Abstract and brief Bios of Florin Catrina and Ethan Pribble
[5] See next page for the *Call For Abstracts* for this session

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 2011 Annual Meeting to be held on Sunday, May 1, at Stony Brook University in Stony Brook, New York. All interested professionals and students are encouraged to submit an abstract. The Contributed Paper Sessions will feature presentations on both mathematics education and mathematical research. There will also be a Poster Session at our meeting.

College and high school students are especially encouraged to submit an abstract discussing their experience with mathematical research. Student presenters will have their meeting registration and luncheon fees waived. Teachers, please encourage your students to present!

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

All proposals should include the following elements:
1. Title
2. Abstract not to exceed 400 words
3. Presentation Summary not to exceed 80 words (for publication in the Annual Meeting program)
4. Category of presenter (student or nonstudent)
5. Name(s) of author(s) and presenter(s) with institution(s) (if any)
6. E-mail address(es)
7. Special equipment needs (if any)
8. Presentation preference (paper or poster)
9. (For HS and college student presenters) Name/e-mail address of mathematics teacher or advisor

Prepare your proposal as a single file, either in MS Word format or in plain text. For file name, use "firstname_lastname_abstract" followed by ".doc" or ".txt". Please submit proposals electronically as an attachment to Jerry G. Ianni at the following e-mail address: iannije@lagcc.cuny.edu and use "MAA MetroNY 2011 meeting abstract" as the subject line. Proposals received by Friday, April 1, will receive full consideration. A committee of reviewers will examine all abstracts, and the outcome of their deliberations will be announced by about April 20.

For additional information regarding the Contributed Paper and Poster Sessions of the 2011 Annual Meeting, please contact Jerry G. Ianni at the e-mail address listed above.

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Presentation Abstracts and Speaker Biographies

Demonic Graphs and Undergraduate Research

Aparna Higgins, University of Dayton

Abstract:
Working with undergraduates on mathematical research has been one of the most satisfying aspects of my professional life. This talk will highlight some of the beautiful and interesting research done by my former undergraduate students on line graphs and pebbling on graphs. We will consider line graphs, some pioneering results in pebbling graphs, and pebbling numbers of line graphs. This work has inspired other students to investigate questions in these areas, and it has contributed to my research as well.

Speaker Biography:
Aparna Higgins received a B.Sc. in mathematics from the University of Bombay in 1978 and a Ph.D. in mathematics from the University of Notre Dame in 1983. Her dissertation was in universal algebra, and her current research interests are in graph theory. She has taught at the University of Dayton, Ohio, since 1984. Although Aparna enjoys teaching the usual collection of undergraduate courses, her most fulfilling experiences as a teacher have come from directing undergraduates in mathematical research. She has

(continued)

advised twelve undergraduate Honors theses; she has co-directed an NSF-sponsored Research Experiences for Undergraduates program; and she continues to help students prepare talks for regional and national mathematics meetings. Aparna is an advocate of academic year undergraduate research at one's own institution. She has presented workshops (often with Joe Gallian) at mathematics meetings on directing undergraduate research. She enjoys giving talks on mathematics to audiences of various levels and backgrounds.

Aparna has been the recipient of four teaching awards -- from the College of Arts and Sciences at the University of Dayton, the Alumni Award (a University-wide award), the Ohio Section of the Mathematical Association of America, and in 2005, the Deborah and Tepper Haimo Award for Distinguished College or University Teaching, which is the Mathematical Association of America's most prestigious award for teaching. Aparna has served the MAA in many capacities, including being a founding member of, and then chairing, the Committee on Student Chapters, which helped create and maintain Student Chapters, provided support to Sections for student activities and provided appropriate programming for undergraduates at national meetings.

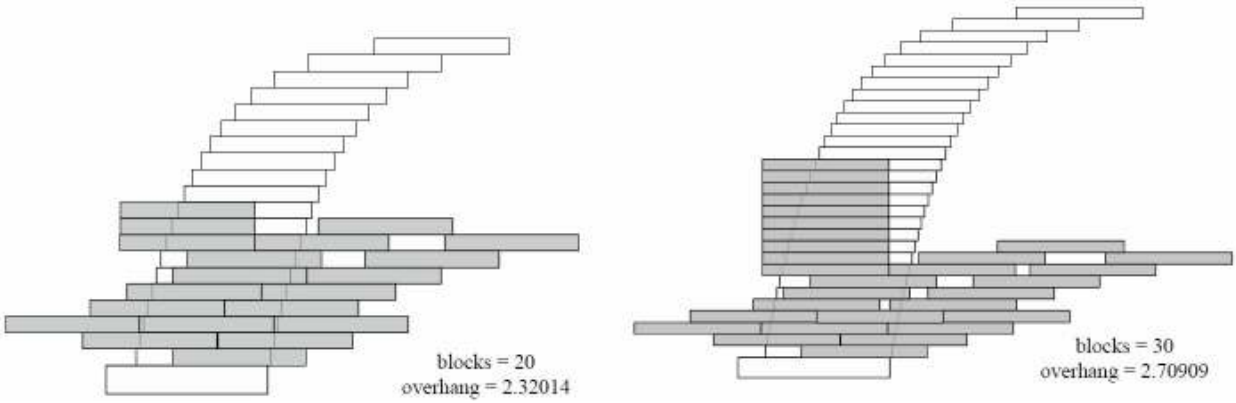
Aparna is Director of Project NExT (New Experiences in Teaching), a professional development program of the MAA for new or recent Ph.D.s in the mathematical sciences. Project NExT addresses all aspects of an academic career: improving the teaching and learning of mathematics, engaging in research and scholarship, and participating in professional activities. It also provides the participants with a network of peers and mentors as they assume these responsibilities. Aparna Higgins is married to Bill Higgins, a mathematician who teaches at Wittenberg University, in Springfield, Ohio. They like to take year-long sabbaticals and spend part of that time teaching at other institutions. They feel privileged to have taught at the Naval Postgraduate School in Monterey, California, at the United States Military Academy in West Point, New York, and at California State University Channel Islands. Aparna and Bill Higgins have two sons.

Puzzles You Think You Must Not Have Heard Correctly

Peter Winkler, Dartmouth College

Abstract:
Some mathematical puzzles have the property that when they are presented, certain questions are inevitably raised. Perhaps the puzzle seems to make no sense, or it asks for something to be proved that sounds trivially true or trivially false. Puzzles in this category turn out to be among the most amusing and/or educational in the puzzle repertoire. I will present several of my favorites, some with solutions, some without.

Speaker Biography:
Peter Winkler is Professor of Mathematics and Computer Science, and Albert Bradley Third Century Professor in the Sciences, at Dartmouth College. Winkler's mathematical research is primarily in combinatorics, probability, statistical physics, and the theory of computing. He holds a dozen patents in cryptology, holography, distributed computing, optical networking, and marine navigation. He is the author of two collections of mathematical puzzles, a portfolio of compositions for ragtime piano, and (just published) a book on cryptologic methods in the game of bridge.



The Common Core State Standards, Now Assessment: An Update

Henry Kepner, University of Wisconsin - Milwaukee

Abstract:
Over the last two years, a mathematics standards movement has been driven by the National Governors Association and the Council of Chief State School Officers. This session will take a close look at the resulting standards adopted by over 40 states; report on efforts to interpret the standards; challenges in their implementation; and a view of efforts to develop assessments.

Speaker Biography:
Hank Kepner takes his expertise in mathematics education directly into classrooms and school districts, both locally and nationally. He is professor of Mathematics Education and holds an appointment in the Department of Mathematical Sciences, University of Wisconsin - Milwaukee. He has taught middle and high school mathematics for 12 years in Milwaukee and Iowa City and is currently active in K-12 schools. Kepner is Immediate Past President of the National Council of Teachers of Mathematics. Earlier, he served five years as program officer at the National Science Foundation in Washington, D.C. He was a founding member and president of the Association of Mathematics Teacher Educators. He was president of the National Council of Supervisors of Mathematics, and the Wisconsin Mathematics Council.

***WeBWork* Workshop**

Florin Catrina, St. John's University and Ethan Pribble, SUNY - Old Westbury

Abstract:
WeBWorK is an open source online homework system. It is supported by the MAA and the NSF and comes with a National Problem Library (NPL) of over 20,000 homework problems. This workshop is designed to introduce the faculty participants to WeBWorK. It is also hoped that the workshop will help foster and develop the community of WeBWorK users in the NY Metro area. More information can be found at: http://webwork.maa.org/home/index.html

Speaker Biographies:
Florin Catrina is an Assistant Professor at St. John's University in Queens, NY. He received his PhD from Utah State University in 2000, in Nonlinear Analysis and Elliptic PDE's. After his PhD he had two three-year appointments: one at the University of Rochester, and one at Worcester Polytechnic Institute, before moving to New York. In Rochester he became familiar with WeBWorK by direct interaction with the creators of the system: Arnold Pizer and Michael Gage. Florin has been using WeBWorK every semester since Fall 2000, and he likes to think that this fact influenced some of the faculty at WPI and at St. John's University into adopting this system.

Ethan Pribble is an Assistant Professor at SUNY College at Old Westbury on Long Island, NY. He received his PhD from Northwestern University in 2004 in Algebraic Stacks and Stable Homotopy Theory. He had a three year postdoctoral position at the University of Rochester from 2004 until 2007 where he became involved with WeBWorK. He has been at SUNY College at Old Westbury since 2007 where he continues to use and promote WeBWorK as well as other learning technologies such as GeoGebra. He is currently interested in finding ways to enhance learning and the larger educational process through the use of open source software.

2011 METRO NY SECTION OF THE MAA MEETING REGISTRATION FORM

(* PLEASE PRINT ***)**

First Name: _____ M.I.: _____ Last Name: _____

Badge Name or Nickname: _____ Affiliation: _____

Address: _____

City: _____ State: _____ Zip+4: _____-_____

Phone Number: Day: (___)_____ E–mail: _____

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

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

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

Current MAA Member: ☐ Yes ☐ No First Metro NY Section Meeting? ☐ Yes ☐ No

Faculty members at a college or university, please check the highest mathematics degree offered by your current institution: ☐ Associate ☐ Bachelors ☐ Masters ☐ Doctorate ☐ None

Current employment/student status (check all that apply):

☐ High School Student ☐ Undergraduate Student ☐ Graduate Student

☐ High School Teacher ☐ College/University Professor ☐ Business, Industry, Government Employee

☐ Retired (from?) _____ ☐ Other (please specify) _____

I wish to participate in the *WeBWork Workshop*: ☐ Yes ☐ No

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Registration Fee*: On/Before 15 April		$10.00	_____
(Postmarked)	After 15 April	$15.00	_____
	Student Registration	$ 5.00	_____
Luncheon*? (circle one) Yes / No		$15.00	_____
		TOTAL:	=======

* Registration and lunch fees waived for:
  - students presenting papers or posters
  - 50-Year Members (see page 6)

* Registration fee waived for:
  - 25-Year Members (see page 6)

Important Note: On-site registration will be available (at the higher registration fee), but all members are encouraged to pre-register by mail as early as possible. Registration forms received on or after April 26 will not be processed in advance of the meeting. Luncheons are not guaranteed for attendees registering on-site.

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Mail completed form with payment payable to *The Metropolitan New York Section of the MAA* (do not send cash) to:

Mohammad Javadi, MetroNY MAA Treasurer
Mathematics, Computer Science, and Information Technology
Nassau Community College
One Education Drive
Garden City, NY 11530-6793

Directions to: **Stony Brook University (SUNY)**
Stony Brook, NY 11794

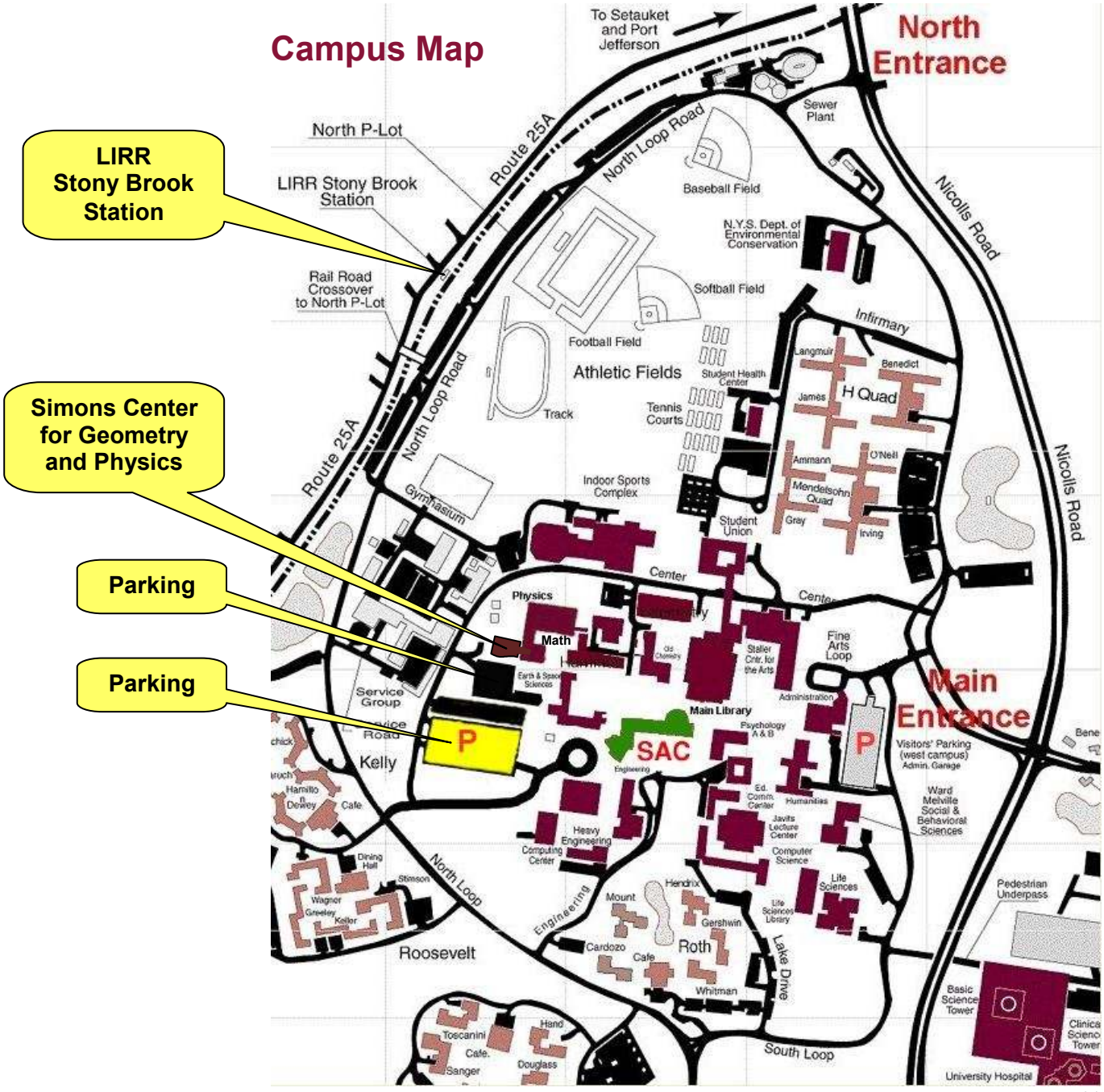
By Car

From New York City, take the Long Island Expressway (LIE, I-495) eastbound from the Queens Midtown Tunnel in Manhattan or the Throgs Neck Bridge or Whitestone Bridge in Queens to exit 62, and follow Nicolls Road (Route 97) north for 9 miles. The main entrance to the University is on the left. To find the campus via GPS, enter the address *100 Nicolls Road, Stony Brook, NY 11790*.

By Train

Take the Long Island Railroad's Port Jefferson line from Penn Station in Manhattan to Stony Brook. The LIRR station is at the north end of the campus, and only a 6 minute walk to the *Simons Center*. Trains to and from Penn generally require transfers at Jamaica or Huntington. Hicksville is also a transfer point on some lines. Find schedule and fare information at: http://lirr42.mta.info/

For additional maps, visit: http://www.stonybrook.edu/sb/maps.shtml



FEATURED ARTICLES

Why a Former Hedge Funder Is Building a Museum for Math

Ariel Schwartz, Fast Company

(Taken, with permission, from fastcompany.com - 28 February 2011)

Hands-on science museums – think New Jersey's Liberty Science Center or San Francisco's Exploratorium – are popular with school groups and adults alike. Can a hands-on math museum generate the same kind of excitement? Glen Whitney, a former algorithm manager at hedge fund giant Renaissance Technologies, thinks it can.

Whitney is in the process of securing space in Manhattan for the Museum of Mathematics, an interactive museum that will, in theory, make math jump out of textbook pages and into real-life activities.

The idea for a math museum came to Whitney after he visited the Goudreau Museum, a small Long Island museum dedicated to math, with his family. When Whitney found out that the museum closed in 2008 due to lack of funds, he started toying with the idea of building a new one. "I started thinking, maybe there's an opportunity. We have a cultural problem around math," he says. "You can go to a cocktail party and it's perfectly acceptable to say 'I was lousy at math.' It's not perfectly acceptable to say 'Oh, I was terrible at history.' To combat a cultural problem, we need a cultural institution."

So after leaving his hedge fund job in 2008, Whitney set up the Math Midway, a traveling hands-on math exhibition that continuously tours the U.S. (it will be at the Museum of Nature and Science in Dallas, Texas, until mid-May). The 4,500-square-foot exhibition features over 20 exhibits, including a square-wheeled tricycle, the "Mathematical Monkey Mat," and a DIY harmonic pattern activity. The Midway is already booked until 2013.

Now, armed with $22 million in funding, Whitney is hunting for a 20,000-square-foot facility in Manhattan for a permanent Museum of Math. He hopes to eventually raise $30 million – enough to expand the museum to a second floor. "We have several ideas for exhibits with a great deal of vertical height," he says.

One exhibit that could eventually be found at the museum: an aquarium of mathematical surfaces. "There's a column of water, and you can inject bubbles at just the right time into this column so they will rise at a constant rate," Whitney explains. "If you inject at the right sequence, it creates a surface of bubbles, an interesting 3-D surface. It's like a bubble fountain of mathematical surfaces."

Once Whitney finds space for the museum, he expects it to open fairly quickly – by 2012, if all goes well. And for those Manhattanites who can't wait? Whitney has an ongoing series of popular public presentations, dubbed Math Encounters, that cover everything from the geometry of origami to symmetrical patterns in music, drawing, and dance. "I think people are understanding how important math is and how we're falling a bit behind," he says.

The Museum of Mathematics webpage is: momath.org

*** See page 16 for volunteering opportunities with the museum! ***

Math BC (Before Calculators): Mental Math in the 21st Century?

Robin A. Schwartz, College of Mount Saint Vincent
Author, Build Math Confidence monthly e-newsletter
www.mathconfidence.com • robinthemathlady@gmail.com

Those of us who are old enough to remember Math BC (before calculators) may have a different perspective than the younger generation about mental Math.

In the old days, when the phone was attached to the wall and all bank tellers were people, you either had to do the work by hand or in your head. Nowadays, we depend on technology to do the heavy lifting (i.e. regression on the calculator, spreadsheets for calculating averages and sums of columns) but what is the use of technology for common computations? There is a delicate balance between technology dependence and self-dependence. When I surveyed my college students, some said that mental Math would make them more confident, but others said mental Math would be more work and that their calculator was always right!

There must have been people who knew how to ride a horse when the automobile became popular and there are still some today that ride but it is no longer a common skill. Math is now analytical rather than computational – the SAT has allowed a calculator since 1994 and has changed the types of questions since straight computations would just be pressing calculator buttons. While the graphing portion of the calculator has promoted deeper understanding, many use the calculation portion for 6 x 3 or rely on the Tip Calculator on their cell phones.

We want to adopt new ideas but remember how we learned to play with numbers and want to share that experience. Many people have not had exposure to mental Math and may not see the joy in problem-solving. The automaticity of Math facts allows one to think more deeply and quickly – getting to the EUREKA! of problem-solving.

Mental Math is important for many reasons. Calculators are not always allowed on college placement tests and students can end up in remedial non-credit classes. Working numbers in one's head develops cognitive abilities and persistence as well as a sense of accomplishment. Thinking mathematically broadens choice of college major and job opportunities -- it can also help on interviews. Typical interview questions include "Tell me about yourself," "What are your strengths or weaknesses?," "Why should we hire you?." Technical interviews often add questions on programming or puzzles.

On a third round bank interview for a computer support position, I expected Excel questions, I got "What's 24 x 12?." When I answered "288," he asked how and I said "12 x 12 x 2." He said he solved it with "24 x 10 + 24 x 2." I then said "24 squared is 576. 24 24's is 576 so 12 24's is half of that – 288." And then I realized that 18 was halfway between 24 and 12 and came up with another way: FOIL (18 + 6) (18 – 6) = 18^2 – 6^2 = 324 – 36 = 288. I got the job!

Robin (the Math Lady) helps people build their Math Confidence. Back in the '90's, answering "24 x 12" correctly on a Finance job interview foreshadowed her career path. After Wall Street, electrical engineering, and two babies, she went back to her first love – Math.

Improve Mental Math by:
Knowing Math Facts: www.fasttmath.com

Multiplying by Powers of Ten Helps with Estimation

Multiplying by Elevens: http://scribbles.dot-ed.com/post/1211471669/multiplying-by-eleven-easily#

Hundreds Pairs (Change of a Dollar such as 27 and 73): http://www.quia.com/jg/1974697.html

References:
History of Calculator Use on the SAT from the College Board
http://professionals.collegeboard.com/profdownload/pdf/rn16_10767.pdf

How Would You Move Mount Fuji?: Microsoft's Cult of the Puzzle – How the World's Smartest Companies Select the Most Creative Thinkers, by William Poundstone. ISBN-13: 978-0316778497

NEWS FROM OUR SECTION

In Memoriam: Bernard Sohmer (16 July 1929 – 19 November 2010)
by Emily Sohmer Tai

Bernard Sohmer grew up in University Heights and the Bronx, a second generation immigrant son of parents from Russia and Romania. Bernie's life-long sympathy for students who overcame obstacles to pursue education was seeded by the example of his mother, who studied English with a newspaper and a dictionary on daily subway trips to work, as well as his own experience of working his way through undergraduate study at New York University. It was through a friend Bernie made while working at one Central Post Office job that Bernie met Margot Rosette, who became his wife in July, 1952. Their first date, on April Fool's Day, 1950, was an anniversary Bernie would observe to the end of his life.

Bernie had been bound, originally, for medical school, but reversed course as he discovered a deeper love for mathematics. In 1958, Bernie completed a doctorate in algebraic groups under the direction of Wilhelm Magnus at NYU's Courant Institute of Mathematical Science. He joined the faculty of City College in 1952, teaching summer courses at Wesleyan University, and as an adjunct at Brooklyn Polytechnic Institute.

As a Professor of Mathematics, Bernie became known for teaching difficult mathematical concepts "with gusto," and contagious enthusiasm. Throughout his career, Bernie remained active in the Mathematical Association of America. He served as Chair (1991-93) and Governor (1996-99) of the Metropolitan NY Section and received the Section's Meritorious Service Award in 2001 and later that year received the National Service Award. But Bernie also demonstrated a special gift for communicating with students and colleagues across disciplinary, generational, political and racial divides that became increasingly critical during the tense protest years of the 60's and 70's. It was these talents that elevated Bernie to a series of administrative and faculty governance posts over the course of his career: associate Dean of Curricular Guidance (1967-1969); Dean of Students (1969-1972); Vice-Provost for Student Affairs (1972-1974); chair of the City College Faculty Senate (1977-1979; 1985-1991; 2002-2004); Faculty Ombudsman (1991-1998 and 2002-2004); chair of the City College chapter of the PSC (1993-1996); Executive union council member (1997-2000); Executive Committee member of the University Faculty Senate (1980-2002); and UFS Chair (1998-2002).

A 2002 UFS resolution hailed Bernie as "a venerated Institution" of the City University of New York. Bernie's wit, wisdom, and commitment to CUNY enriched generations of students, colleagues, friends, and family.

Family members have asked that Bernie Sohmer be remembered through contributions to a scholarship established in his name to benefit undergraduates in mathematics at CCNY. Contributions to the Bernard Sohmer Scholarship should be sent to: Rosemary Weiss, Executive Director of Development, CCNY, 160 Convent Avenue, Shepard Hall 154, NY, NY 10031.
(E-mail rweiss@ccny.cuny.edu for more information.)

New Book

Dr. John Loase's latest book, *Statistics Made Easy*, was just released by the Graduate Group. It is said to be an accessible and much needed alternative to the usual voluminous statistics texts. It explains the importance of the key topics, has 90 pages of conversational background, merging with 90 pages of TI-83 based statistics. John can be contacted at Concordia College - NY or via e-mail: john.loase@concordia-ny.edu.

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CALL FOR PARTICIPANTS AND INVOLVEMENT

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 2011 Spring Meeting to be held on Sunday, May 1 at the Stony Brook University (SUNY). 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 7 for the particulars.

Call for Math Fair Judges

The **Al Kalfus Long Island Math Fair** will hold its Preliminary Round (Western) on Friday, March 4, 3 PM, at Hofstra University, Preliminary Round (Eastern) on Friday, March 18, 3 PM, at Suffolk Community College, and the Final Round on Friday, April 29, 3 PM at Hofstra University. Judges are needed at all levels (grades 7-12). If you wish to judge, please contact Joe Quartararo at 631-584-2016 or mathfair@optonline.net.

The Greater **Metropolitan New York Math Fair** is an annual event in which High School students from all over New York City (and environs) present math papers. It is a great privilege as well as an enjoyable experience to help high school youngsters advance in their pursuit of creativity. Anyone who can spare one or two days - March 13 and April 10, 11-3 PM at Brooklyn Technical HS, 29 Ft. Greene Place, Brooklyn - is invited to sign up as a judge. You can sign-up (time required < 3 minutes) by visiting the Math Fair URL:

http://www.bths.edu/forms/math-fair-judges/

Those who judge, whether one day or both days, besides receiving the satisfaction of helping youngsters grow in creativity, as well as enjoy

a) a free brunch and social hour
b) a pleasant morning with colleagues from the New York area
c) official Letters of *Thank you* sent to your chair or supervisor, and
d) a sense of satisfaction in helping to introduce research to future mathematicians

For more information, contact: Russell Jay Handel, Coordinator of Judges, at RHendel@Towson.Edu

New York Math Circle

The New York Math Circle will run their 3rd annual Math Teachers' Circle Summer Workshop, July 25-29, 2011 at Bard College, Annandale-on-Hudson, NY. The week-long immersion workshop is intended for both middle school and high school math teachers, and the theme is *Inequalities: AM-GM and beyond*. Please encourage a math teacher you know to attend. For the latest information, please visit www.nymathcircle.org, or email Dr. Japheth Wood <jwood@bard.edu>. See page 21 for an employment opportunity with the NY Math Circle.

Volunteers Sought for the Museum of Mathematics

The Museum of Mathematics (MoMath - see page 12 for more about the museum) is looking for volunteers to help out at the following events:

- *Bronx Middle School Math Tournament* (April 5th): MoMath is partnering with Con Ed to host the Bronx Middle School Math Tournament in Manhattan on Tuesday, April 5th (8:30am - 2pm). We need volunteers (ideally current or retired math educators) to chaperone contestants, proctor the competition phase of the tournament, and grade students' work.
- *Math Encounters Lecture Series* (monthly): In collaboration with the Simons Foundation, MoMath has recently launched a monthly lecture series exploring the fascinating world of mathematics (http://momath.org/home/math-encounters/). We are looking for volunteers to greet and assist attendees at these events.
- *Math Midway Exhibit* at the World Science Festival (June 5th): MoMath's "Math Midway" exhibit (http://mathmidway.org/) will again be at the World Science Festival in Manhattan this summer. We need volunteers to help visitors enjoy our hands-on, innovative exhibits, highlighting that math can be exciting, engaging, and fun.

We are most in need of volunteers for the April 5th Bronx Middle School Math Tournament. We have some schools that want to send contestants, but need chaperones in order to participate. MoMath wants to make math accessible to all students, and we are looking to our volunteers to help us accommodate schools that would otherwise be left out.

If you are interested in volunteering at any of these events, please email volunteers@momath.org. Thanks!

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 49th 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 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) 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.

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.

NEWS FROM THE MAA

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

Plenty More Science and Research Content on World's Largest Knowledge App Site

Wolfram Research, Inc., claims to have the world's largest collection of interactive knowledge apps. The site now contains 7,000 interactive models that allow users to do the following:

- Access innumerable interactive demonstrations illustrating topics in mathematics, science, engineering, technology, business, art, finance, social sciences, etc.
- Test ideas, concepts, and theories via computation and get results without downloading files or switching applications.
- Report findings.

"The Wolfram Demonstrations Project" is fueled by the user community of Wolfram's core software—Mathematica—which makes it easy to create and publish interactive applications, according to the organization.

"Demonstrations are a real game changer for the college classroom," said mathematician Bruce Torrence (Randolph-Macon College). "The interactive interface with sliders and buttons lets students adjust parameters, see how things change, and gives them the satisfaction of knowing they really understand the concepts. It's almost like a telescope into a world you couldn't see otherwise."
For examples, see: http://demonstrations.wolfram.com/about.html

Source: Wolfram News

MAA Sponsors Winning Team at Romanian Masters in Math & Science

The U.S team at the 4th Annual Romanian Master of Mathematics & Science (RMMS) competition is bringing home the trophy. This year's competition was held in Bucharest, Romania, from February 23rd to February 28th, 2011. The RMMS is an invitational, six-question contest and follows the same structure as the International Mathematical Olympiad (USAMO) and the International Physics Olympiad. This year, 90 students from 13 countries competed. The U.S. team of six high school students was selected by the MAA's American Mathematics Competitions program.

Michael Druggan	12th grade	Tates Creek Senior High School	Lexington, KY
Zijing Gao	10th grade	Homeschooled	Chapel Hill, NC
Mitchell Lee	11th grade	Thomas Jefferson High School	Alexandria, VA
Bobby Shen	10th grade	Dulles High School	Sugar Land, TX
Victor Wang	10th grade	Ladue Horton Watkins High School	St. Louis, MO
Joy (Shijie) Zheng	12th grade	Philips Exeter Academy	Exeter, NH

Bobby Shen and Mitchell Lee each won a gold medal, and Michael Druggan won a bronze medal in the competition. Bobby Shen had the second highest score in the competition, and Mitchell Lee had the third highest score overall. The U.S. was the only country to win two gold medals, and the combined total of the top three finishers was enough to make the U.S. the overall team winner. Winners of the RMMS get to bring home the traveling trophy inscribed with the names of the winning countries. Joy Zheng and Victor Wang each received an honorable mention for a complete solution of the fourth problem.

This is the third year that the MAA has sponsored a team at the RMMS. The team was selected on the basis of their scores in the 2010 AMC competitions, the USAMO, and their performance at the previous summer's Mathematical Olympiad Summer Program.

All problems, solutions, competitors, results, and scores are on the RMMS website.

Erdös Documentary Available as Streaming Video

George Csicsery's well-received *N Is a Number: A Portrait of Paul Erdös* (1993) can now be viewed as streaming video.

The one-hour documentary focuses on the mathematician who pioneered fields in theoretical mathematics and who wrote and co-authored more than 1,500 papers while wondering the globe. *D*
iscover Magazine described it as one of the best science videos of the last 20 years. It was produced with support from the MAA, the AMS, the NSF, the Film Arts Foundation, and the Heineman Foundation.

Erdös (1913-1996) speaks of his life's passion and love of numbers, having made his name as a serious mathematician at the age of 20 when he devised an elegant proof for Chebyshev's theorem. In Budapest, he was one of the gifted mathematicians in the "Anonymous Group."

Colleagues Ron Graham and Joel Spencer fill in the story and add insights about the man who would, however, become famous as the peripatetic mathematician who would gather and deliver mathematical news and developments to and from innumerable mathematicians.

Watch *N Is a Number: A Portrait of Paul Erdös* at FORA.tv Films.

Russian Animates Mathematics

Nikolai Nikolaevich Andreev has created award-winning, computer-based animations that explicate mathematical ideas, formulas, theorems, and graphs.

Called "Mathematical Studies," his examples include an interactive proof of the Pythagorean theorem; why a trolley with non-round wheels can roll; and how to drill a square hole.

Andreev, who heads the Stetlov Mathematical Institute's Laboratory of Popularization and Promotion of Mathematics, in Moscow, specializes in function approximations, trigonometric polynomials, orthogonal polynomial systems, cubic formulas, and discrete geometry.

"The reactions of students in multimedia seminars are always enthusiastic. Frequently, after the lectures, the students ask me to show something else," Andreev told RIA News. "If, because of our movies, at least a few people enjoy the mathematical science, it's a step in the right direction. We want to convey that this science can help achieve things in life."

At a ceremony in the Kremlin on "Russian Science Day" (February 8, 2011) Andreev was awarded a Presidential prize for outstanding results in the creation of innovative educational technologies and for the promotion and dissemination of scientific knowledge.

Math Helps Identify Potential Life-Saving Drugs

Using mathematical concepts, researchers claim to have developed a way of discovering drugs for a range of diseases.

The technique combines concepts from optimization theory, a field of mathematics that focuses on calculating the best option among a number of choices, with those of computational biology, which combines mathematics, statistics, and computer science for biological research.

"The power of this is that it's a general method," said Christodoulos Floudas (Princeton University), who led the research team. While the approach is said to have lead to several potential new drugs for fighting strains of HIV, said Floudas, "it should also be effective in searching for drugs for other diseases."
The findings were reported in *Biophysical Journal* (November 17, 2010).

EVENTS CALENDAR

Al Kalfus Long Island Math Fair 2011
March 4, Friday, (Round 1 – Nassau County) Hofstra University
March 18, Friday, (Round 1 – Suffolk County) Suffolk Community College
April 29, 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 or e-mail: mathfair@optonline.net

44th Greater Metropolitan New York Math Fair (2011)
March 13, Sunday, (Round 1) Brooklyn Technical HS, Brooklyn, NY
April 10, Sunday, (Round 2) Brooklyn Technical HS, Brooklyn, NY
For more information contact Russell Jay Hendel at RHendel@Towson.Edu
For judging, visit: www.bths.edu/forms/math-fair-judges/

LIMAÇON (Long Island Mathematics Conference) • March 18, 2011, SUNY College at Old Westbury
For more information, visit: www.ncmta.net/limacon.htm

MAA Seaway Section Spring Meeting • April 1-2, 2011, Nazareth College, Rochester, NY
For more information visit: www.maa.org/Seaway

Spuyten Duyvil Undergraduate Mathematics Conference • April 2, 2011, Manhattan College,
For more information see page 21, and visit: home.manhattan.edu/~spuytenduyvil/

MAA New Jersey Section Spring Meeting in conjunction with the
8th Annual Garden State Undergraduate Mathematics Conference • April 2, 2011
Essex County College, Edison, NJ
For more information visit: sections.maa.org/newjersey/Main/index.html

NYSMATYC Annual Conference • April 8-10, 2011, Corning, NY • Visit: www.nysmatyc.org/conf2011/

AMS 2011 Eastern Section Spring Meeting • April 9-10, 2011, College of the Holy Cross, Worcester, MA
For more information visit: www.ams.org/meetings/sectional/2177_program.html

NCTM 2011 Annual Meeting and Exposition • April 13-16, 2011, Indianapolis, IN
For more information visit: www.nctm.org/conferences/

18th Hudson River Undergraduate Mathematics Conference • April 16, 2011
Skidmore College, Saratoga Springs, NY • Visit: www.skidmore.edu/hrumc.htm

Metropolitan New York Section Meeting • May 1, 2011, Stony Brook University (SUNY), Stony Brook, NY
For more information see this newsletter, or visit: sections.maa.org/metrony/

Graph Theory Day Sixty-One • May 7, 2011, Nassau Community College (SUNY), Garden City, NY
For more information see page 20 of this newsletter.

7th Cornell Probability Summer School • July 11-22, 2011, Cornell University, Ithaca, NY
For more information visit: www.math.duke.edu/~rtd/CPSS2011/

MathFest • August 4-6, 2011, Lexington, KY • For more information visit: www.maa.org/mathfest

AMS 2011 Eastern Section Fall Meeting • September 10-11, 2011, Cornell University, Ithaca, NY
For more information visit: www.ams.org/meetings/sectional/2189_program.html

NCTM Regional Conference and Exposition • October 19-21, 2011, Atlantic City, NJ
For more information visit: www.nctm.org/conferences/content.aspx?id=8844

AMATYC 37th Annual Conference • November 10-13, 2011, Austin, TX
For more information visit: www.amatyc.org/Events/conferences/2011Austin/

MAA-AMS Joint Mathematics Meeting • January 4-7, 2011, Boston, MA
For more information visit: jointmathematicsmeetings.org/jmm

The Metropolitan New York Section of
THE MATHEMATICAL ASSOCIATION OF AMERICA
will sponsor

GRAPH THEORY DAY SIXTY ONE

A one-day meeting to stimulate activity among graph theorists hosted by

Department of Mathematics, Computer Science, and Information Technology

Nassau Community College, SUNY

Saturday, May 7, 2011
10:30 a.m. – 4:30 p.m.

INVITED SPEAKERS

Linda Lesniak

Department of Mathematics, Drew University (Madison, NJ) and Western Michigan University (Kalamazoo, MI)

On Long Monochromatic Cycles in Edge-Colored Complete Graphs

Chris Storm

Department of Mathematics and Computer Science, Adelphi University, Garden City, New York, USA

Two Isospectral Digraph Constructions Inspired by Ihara Zeta Functions

Participants are welcome to contribute a talk to a *Graph Theory Notes* Session. Written contributions will be considered for inclusion in *Graph Theory Notes of New York*. The Program will also include time for informal exchange of graph theory information.

PLACE

Nassau Community College — Building F, Room 123
One Education Drive
Garden City, New York 11530-6793

REGISTRATION FEE

$30 (student fee $20)
(Fee includes lunch, refreshments, and $5 contribution to the MAA Graph Theory Fund).
Lunch can be guaranteed only for registrants whose checks are received by April 26, 2011.

Please make check payable to **"Nassau Community College Foundation"**
with **"Graph Theory Day 61 Registration Fee"** in the memo section.

and send to: Ron Skurnick, Department of MAT/CSC/ITE
Nassau Community College
One Education Drive, Garden City, NY 11530

ADDITIONAL INFORMATION

Registration will commence at 10:30 a.m., accompanied by Danish and coffee. The first invited lecture will begin at 11:00. For additional information, contact:

Ron Skurnick at (516) 572-7380 or <ronald.skurnick@ncc.edu>
Mohammad Javadi at (516) 572-7972 or <mohammad.javadi@ncc.edu>

ORGANIZING COMMITTEE

Ronald Skurnick, Mohammad Javadi, Armen Baderian, Heather Huntington,
Ida Klikovac, Jay Martin, and JoAnne Taormina (Nassau Community College).
John W. Kennedy (Nassau Community College and Adelphi University) and Louis V. Quintas (Pace University)

6th Annual SPUYTEN DUYVIL Undergraduate Mathematics Conference

Saturday April 2, 2011 • Manhattan College • Riverdale, NY

Keynote Address: *Mathematics, Biology and Very Powerful Computers*
Dr. William Pulleyblank
United States Military Academy, West Point, NY

The primary goal of the conference is to offer undergraduates the opportunity to attend and actively participate in a professional mathematics meeting and to discuss mathematics with their peers.

For more information contact Dr. Kathryn Weld: kathryn.weld@manhattan.edu or visit the website: http://home.manhattan.edu/~spuytenduyvil/

SDUMC is an MAA NSF-RUMC sponsored activity, funded by NSF Grant DMS-0846477 and by Manhattan College.

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EMPLOYMENT OPPORTUNITY

Executive Director of the New York Math Circle

The rapid growth of the NYMC necessitates the hiring of an Executive Director to take over daily operations. The position provides an opportunity to drive meaningful change in a fast-growing non-profit organization, and to help many students grow intellectually and personally both directly through high quality programs, and indirectly through supporting excellent teaching of mathematics in schools.

Responsibilities: As the sole full-time employee, the Executive Director will work in collaboration with the Board of Directors to administer, expand, and improve NYMC programs. Responsibilities include:

- Working with the Board of Directors to establish strategic growth plans to meet goals of the organization.
- Management of staff and volunteers.
- Day-to-day running of the organization, including the running of our summer program.
- Building and maintaining relationships with schools, universities, and other partners.
- Serving as an advocate for mathematics enrichment.
- Community outreach to students, teachers, and other interested parties.
- Fundraising, development, grant writing.
- Creating compelling and concise proposals and presentations.
- Recruitment of instructors.
- Evaluating and improving existing programs.
- Day-to-day record keeping and accounting.

Qualifications: The ideal candidate is passionate about mathematics and education, and is able to independently identify strategic goals and develop meaningful partnerships.

- BA in Mathematics or a related subject is required. Graduate degree preferred.
- Excellent administrative skills.
- Experience teaching mathematics.
- Familiarity with mathematics education in NYC and elsewhere, particularly with high level mathematics enrichment (such as math summer programs, competitions, and resources).
- Strong written and verbal communication skills.
- Organized, highly responsible, and comfortable working under pressure and under deadlines.
- Self-motivated with an entrepreneurial spirit, and able to work independently.
- Sensitivity when working with a diverse group of people.
- Patience and perseverance to see projects to completion.
- Strong leadership skills are essential.

Hours: This is a full-time position. The schedule is flexible and may require some evenings and weekends.

Compensation: $50k - $60k, negotiable benefits package.

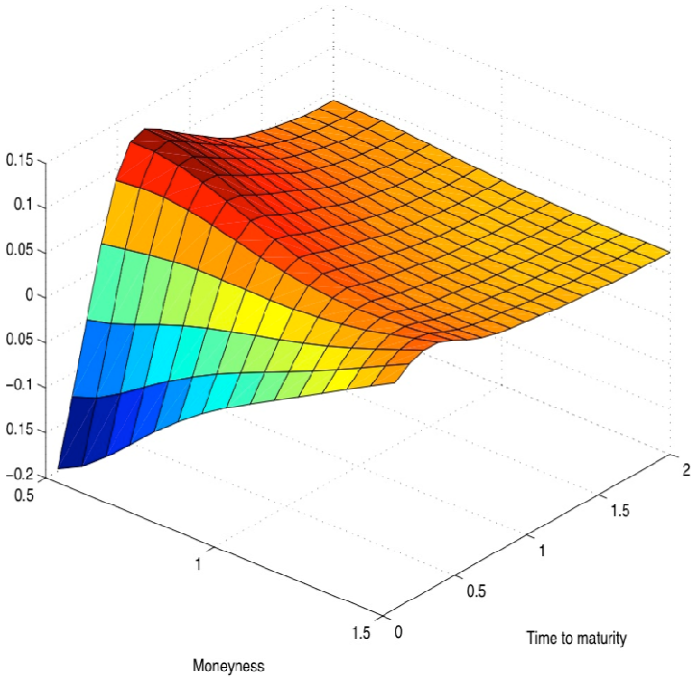
To Apply: Please email a resume and cover letter stating your interests and relevant background to hiring@nymathcircle.org. The subject line should read: Executive Director Position. No phone calls please.

SUNY - Stony Brook Master's Programs in Quantitative Finance and Applied Statistics

Stony Brook's Applied Mathematics and Statistics Department offers a 3-semester, modestly priced M.S. training in quantitative finance and in applied statistics.

Quantitative Finance

A number of Stony Brook Applied Math graduates hold senior investment positions at leading investment banks such as Morgan Stanley and Credit Suisse First Boston, and others have managed large quantitative hedge funds. One successful Applied Math PhD recently endowed the Frey Family Chair in Quantitative Finance. Our quantitative finance faculty have extensive experience in building mathematical trading systems for hedge funds. **Internships** are available to give students first-hand experience with quantitative finance.



Black-Scholes-based Implied Volatility Surface

Applied Statistics

Demand for statisticians remains strong in investment firms, banks, drug companies, medical centers, government and corporate research labs, and more. All Applied Math statistics faculty have extensive experience consulting for government and business

For more information, see www.ams.stonybrook.edu. Applications for fall, 2011 considered through July, 2011.

* *MetroMath* accepts advertising at $50 for a half-page ad and $100 for a full-page.

PLEASE POST

METROPOLITAN NEW YORK SECTION

OF THE

MATHEMATICAL ASSOCIATION OF AMERICA

ANNUAL SPRING MEETING
SUNDAY, 1 MAY 2011

Stony Brook University (SUNY)
Simons Center for Geometry and Physics
Stony Brook, NY

INVITED SPEAKERS

Aparna Higgins, University of Dayton
Demonic Graphs and Undergraduate Research

Peter Winkler, Dartmouth College
Puzzles You Think You Must Not Have Heard Correctly

Henry Kepner, University of Wisconsin - Milwaukee
Common Core Standards

WORKSHOP

Florin Catrina, St. John's University and Ethan Pribble, SUNY - Old Westbury
WeBWork

CONTRIBUTED PAPER AND POSTER SESSIONS

Research, Pedagogical, and Student Presentations

FOR MORE INFORMATION PLEASE VISIT OUR WEBSITE AT
sections.maa.org/metrony

Mark Your Calendars!!!

Spring Meeting

Stony Brook University (SUNY)
Simons Center for Geometry and Physics
Stony Brook, NY

Sunday, 1 May 2011

5.859874482048838473822930854632165381954416493075065395941912220031893036639756593199417003867283495409614478445285366568911258206179625804625693703389076748188416431329882011868793474503702150181401 0

Abe Mantell, Editor
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