Metro Math

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Newsletter

Metropolitan New York Section of The Mathematical Association of America

February 2006



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

ANNUAL MEETING

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Sunday, 7 May 2006 9:00 AM - 5:00 PM

Dowling College Oakdale, Long Island, NY

(Inquire Within for More Information)

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SECTION ELECTIONS

Candidate Bios and Ballot Contained Within...

SECTION OFFICERS

Section Governor (2005 – 2008)

Chair (2003 – 2006)

Chair-Elect (2003 - 2006)

Secretary (2003 – 2006)

Treasurer (2003 – 2006)

Vice-Chair for Four-Year Colleges (2003 – 2006)

Vice-Chair for Two-Year Colleges (2003 – 2006)

Vice-Chair for High Schools (2003 – 2006)

Math Fair Chair – NYC

Math Fair Chair – Long Island

Speakers Bureau Chair

Newsletter Editor

Student Chapter Coordinator

Public Relations Coordinator

Book Exhibit Coordinator

Liaison Coordinator and Webmaster John (Jack) Winn Farmingdale State (SUNY)

Abraham S. Mantell Nassau Community College (SUNY)

Dan King Sarah Lawrence College

Henry Ricardo Medgar Evers College (CUNY)

Dean Nataro Nassau Community College (SUNY)

Sandra Monteferrante Dowling College

Laurie Delitsky Nassau Community College (SUNY)

Ann Davidian MacArthur High School

Peter Shenkin John Jay College (CUNY)

Joseph Quartararo Northport-East Northport Public Schools

Dan King Sarah Lawrence College

Abraham S. Mantell Nassau Community College (SUNY)

David Seppala-Holtzman St. Joseph's College

Lily E. Christ John Jay College (CUNY)

Henry Ricardo Medgar Evers College (CUNY)

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Section Web Page – www.maa.org/metrony

Contact Raymond N. Greenwell at 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 (both sites are linked to each other)

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Metropolitan New York Section of the MAA

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MESSAGE FROM THE SECTION CHAIR

It's time...time for a changing of the guard! My three-year term as Section Chair comes to an end at the close of our May meeting. It has been an honor and privilege for you me to have served the Metropolitan NY Section as chair. On May 7th, Dan King will take the reins as new chair. Dan has been heavily involved with our Section for over 10 years. Having served as the *Speaker's Bureau* chair since 1994, Secretary from 2000-2003, as well as having co-chaired numerous contributed paper sessions for our annual meetings. I am supremely confident that our Section will flourish during his tenure. Good luck Dan!

We are currently planning a joint Fall meeting with the Seaway Section, to be held October 13-14, 2006 at Marist College in Poughkeepsie. Please keep those dates available and check our Section web-page for the latest updates. Now, for our annual May meeting...

This year's meeting will be held at Dowling College, a former Vanderbilt estate located in Oakdale, Long Island. Aside from Dowling's attractive campus and idyllic meeting areas, I am pleased on a personal level. My very first teaching job was at Dowling College (thanks to Sandy Monteferrante, our Vice-Chair for Four-Year Colleges)! "Good for him, but why should *I* go way out to Suffolk County on a Sunday for this meeting?," I imagine some of you saying (especially non-Long Islanders)! My response? Just take a look at the program on page 8!!! Our featured speakers will be Joseph A. Gallian and Arthur T. Benjamin. Joe Gallian has numerous publications, both scholarly and for the general mathematics community (including a brief article in the April 1998 issue of *Math Horizons* on *How to Give a Good Talk*!). He is a popular speaker at meetings across the US, and is currently president-elect of the MAA. Joe will speak about Using Groups and Graphs to Create Symmetry Patterns. Art Benjamin will not only give a featured presentation: Counting on Determinants, additionally he has graciously agreed to entertain us with his *mathemagics*! If you have never seen Art perform his math-magic, I urge you not to miss it...if you have seen his performance, then I know you'll want to see it again! The topic for this year's panel discussion is: Mathematicians Involved in School Mathematics, with panelists Roger Howe (Yale University), Alexander Karp (Columbia Teacher's College), and Alan Tucker (SUNY at Stony Brook). Luise-Charlotte Kappe (SUNY at Binghamton), from the Seaway Section, has kindly offered to give a talk directed to new and recent Ph.D. graduates who may be struggling to maintain their research. Luise-Charlotte will speak about Maintaining Your Research in the First Few Years. Please see pages 9 and 10 for more information about the speakers and their talks, as well as the panels and panelists. During lunch, David Seppala-Holtzman will meet with the Student Chapters, and Ray Greenwell will meet with Section Liaisons. Of course, we will also have a contributed paper and poster session, which always provides a rich variety of mathematics. Please consider presenting a paper or poster, and encourage interested students to do so. We are particularly interested in emphasizing the connections between mathematics and the humanities. See page 8 for the Call for Abstracts.

Next year's meeting was originally scheduled for Saturday, May 5th at Sarah Lawrence College (SLC). However, Dan King has informed us there is a campus-wide activity that prevents us from holding the meeting there on that date, but there would be no problem to have the meeting on Sunday, May 6th instead. Although this would disrupt the Section's tradition of Saturday meetings in odd-numbered years and Sunday meetings in even-numbered years, I propose we schedule the meeting for Sunday, May 6th at SLC. I have included a survey question on the election ballot (page 15). If we are to have it on Saturday, May 5th, then we will need a host site. Thus, if you vote for May 5th, then please include the name of an institution that would be willing to host.

See you in May!

Abe Mantell

MESSAGE FROM THE SECTION CHAIR-ELECT

Y'gotta admit...membership in the Metro New York Section of the MAA is a very, very good deal! Through it's programming and services, the Section provides area mathematicians with invaluable educational and networking opportunities. Our annual meeting, a May tradition, features talks by some of our nation's most accomplished researchers and teachers, offers short paper presentations by local area mathematicians, and provides a venue for members to develop and strengthen bonds with colleagues at neighboring institutions. Furthermore, Sectionsponsored activities including the regional math fairs and the Mathematics Speakers Bureau offer member highly rewarding community service opportunities. And perhaps best of all, membership in the Section comes FREE with your national MAA membership. Perhaps none of this is news to you, but have you considered just how valuable a resource the Section can be to your students?

Over the last few years we've seen an increase in the number of students, high school, undergraduate and graduate students, who have been attending the Annual Meeting and participating in Section activities. We Section officers hope this is a trend that continues. We encourage you to encourage your students to participate in our programs and events.

Student participation in Section activities can be rewarding for a variety of reasons. The special session of contributed papers at our Annual Meeting dedicated to student presentations provides our young scholars with an informal setting to strengthen their presentation and communication skills. The featured talks of the Annual Meeting also serve to introduce our students to a diversity of mathematical topics transcending the typical high school or college curriculum. Several colleges and universities in our area also sponsor a student chapter of MAA allowing students to sponsor programming of their own choosing. Furthermore, graduate students in the area are encouraged to participate in the activities of Metro NExT (New Experiences in Teaching), the local version of the highly successful national Project NExT. And as additional students step forward to participate in Section events, we will surely expand our programming in this important area. (If you have suggestions along these lines, by all means forward your ideas to a Section officer.)

Though students do not need to be members of the MAA to take advantage of Sectionsponsored programming, student membership does provide significant additional resources and opportunities. Student members automatically receive both the FOCUS newsletter and the fantastic Math Horizons magazine aimed at a student readership. And for a tiny additional cost they can subscribe to any of the three MAA journals. Travel grants are also available to subsidize student participation in MathFest, the MAA's annual summer meeting.

Student membership only costs \$25 and can be including in an institutional membership. However, students who present a talk at the Annual Meeting are rewarded with not only a free lunch but also a free one-year student membership in the MAA including journal subscription. So we hope you will consider bringing a student or two with you to our meeting this Spring (Dowling College, May 7). They will have much to gain from the experience, and they'll love you for it!

Best wishes for a productive and enjoyable Spring!

Dan King

MESSAGE FROM THE SECTION GOVERNOR

The Board of Governors (BOG) met in San Antonio, Texas on January 11, 2006. In keeping with tradition, the meeting began, by way of introduction, with everyone stating his/her name and section. The President's Report was then given by President Carl Cowen. The president noted that there was more agreement on the issues concerning K through twelve mathematics education than disagreements and that the MAA would participate in a NSF funded effort to continue the conversation on these issues. President Cowen attended meetings of the *Joint Policy Board of the Mathematical Sciences* and the *Conference Board of Mathematical Sciences* (held at MAA headquarters). President Cowen stated that he looks forward to future traveling and representing the MAA in the appropriate way during his last year of office.

Treasurer John Kenelly reported that we are meeting our investment goals. A Balance Sheet and third quarter report from our investment advisor, Pipich Boucek was provided. The finances of the MAA can be approximately described as \$9 million operating, \$8 million endowment, \$7 million building, and \$7 million grants. The Treasurer's Report was quite optimistic and indicated very effective improvement in matters related to the MAA's finances. The BOG approved an Ethics and Whistleblower Policy. As part of this it is stated that "The MAA specifically prohibits any conduct which is discriminatory, harassing, or threatening on the part of any staff member or MAA member to any other person engaged in MAA operations". During the Budget Committee Report there was an extensive discussion on dues restructuring. A process for structuring future dues was approved by the BOG. Under the approved proposal, the recommended dues for 2007 would be:

2007 Dues	Μ	G	J	MG	MJ	GJ	MGJ
Regular	178	158	158	214	214	194	250
Regular Discount	142	126	126	178	178	162	214
Grad Student, Unemployed	59	52	52	95	95	88	131
Retired	89	79	79	125	125	115	161

In the Secretary's Report (Martha Siegel) it was mentioned that Don Albers resigned from the position of Associate Executive Director and Director of Publications. He will continue working as Acquisitions Editor. The Associate Secretary (Jim Tattersall) reported that a listing of all meetings is now on the MAA web page and that the 2007 JMM will most likely be held in New Orleans as planned (more information on this can be found on the MAA web site).

First Vice President, Barbara Faires, discussed progress regarding strategic planning. The Cycle I areas of strategic planning are the American Math Competition, Professional Development, and Revenue. The Cycle II areas are Governance, Membership, and Students. The Cycle I report will be submitted in November 2006 and the Cycle II report will be submitted in November 2007. In the work on professional development, volunteers are still needed to interview teachers. If you wish to volunteer, please contact Barbara Faires (faires@westminster.edu). Second Vice President, Jean Bee Chan, gave a report on the new *Handbook for MAA Governors*. It can be found at http://www.maa.org/bog/.

The Executive Director, Tina Straley, reported that public policy activities are moving along well. One goal is to increase funding for mathematics and math education. Last Spring the MAA participated in Congressional Visits Day for the first time. This year's theme for Math Awareness Month will be Math and Internet Security. Don Albers (Director for Publications) reported on MAA publications. There were twenty-two new books published in 2005. Amazon sales were up by 20%. Martin Gardner's *Mathematical Games* has sold nearly 1,300 copies in three months and is "leading the pack". MAA Online sales are also strong and are above 2004 levels. Through JSTOR, the three MAA Journals are now available in 140 countries around the world. Lang Moore (PI) gave an update on MathDL and Math Gateway. The MAA Reviews (this is an electronic version of the Telegraphic Reviews) and 6

Classroom Capsules are now available online to MAA members or subscribers. To gain access to the MAA Reviews and Classroom Capsules, you must log in with your member number, which can be found on a journal mailing label. Your last name is used as your password.

Michael Pearson (Director of Programs and Services) reported on the eight funded projects: MAA Undergraduate Math Conferences, SUMMA, PMET, Renewal of College Algebra, Meeting the Challenges, PREP, SAUM and Advancing Community College Careers. William Hawkins (Director of the Office of Minority Participation) gave an update on the SUMMA program. Projects include NREUP which supports twelve researches and 53 students at twelve institutions. Other projects are Mathematics for Business Decisions, Project Welcome, Calculator Assistance Program, Minority Poster, and the Archival Record. A database of minority graduate mathematics students and professionals is being developed through a collaborative effort of AMS, MAA, MSRI, NAM and NCTM.

Jim Gandorf (Director of Membership, Marketing and Meetings) reported on membership (it is solid) and progress on the Carriage House Renovation which will transform the carriage house into a modern mathematical conference center. Further information on this can be found on a link via the MAA homepage.

Steve Dunbar (Director, American Mathematics Competitions) gave a full report on the successful and expanding American Mathematics Competitions. If your school wishes to host one of these mathematics competitions, contact Steve Dunbar (sdunbar1@unl.edu).

Lisa Kolbe (Development Manager) provided details on the Mathematical Study Tours. The 2007 Study Tour will honor Euler's 300th birthday. Roseann Brown (Director, Information Services) reported that improvements were being made in the Math Gateway portal design and beta testing has started on the search features. Sharon Tryon (Director, Finance) stated that she is looking forward to implementing recommendations arising out of strategic planning and that the MAA is currently financially secure.

We also heard reports from the editors of the MAA journals. Allen Schwenk noted an increase in the number of submissions to Mathematics Magazine and Fernando Gouvea encouraged submissions to FOCUS.

As usual, a great deal of business is conducted at the Governor's Meeting. Any omissions certainly are not meant to diminish the importance of those contributions or comments.

Jack Winn

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TREASURER'S REPORT

(as of 1/15/06)

Business Checking Business Money Market	\$ 8,828.68 \$ 9,002.01
6-Month Business CD	\$29,413.24
Total	\$47,243.93

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

Dean Nataro

2006 SPRING MEETING PROGRAM (Preliminary)

8:30	—	9:10 AM	Registration, Refreshments, Book Exhibits
9:10	—	9:20 AM	Welcoming Remarks
9:20	-	10:10 AM	Presentation: Using Groups and Graphs to Create Symmetry Patterns ¹ by Joseph A. Gallian, University of Minnesota Duluth
10:10	_	10:30 AM	Break (with time to visit exhibits)
10:30	—	11:30 AM	Panel: Mathematicians Involved in School Mathematics ²
			Panelists: Roger Howe, Yale University
			Alexander Karp, Columbia Teacher's College
			Alan Tucker, SUNY at Stony Brook
			Moderator: Ann Davidian, MacArthur High School, Levittown
10:30	_	11:30 AM	Special Presentation: <i>Maintaining Your Research in the First Few</i> Years ³
			by Luise-Charlotte Kappe, SUNY at Binghamton
11:35	—	12:15 PM	Special Presentation: Art Benjamin – Mathemagician!!!
12:20	—	1:25 PM	Lunch (with time to visit exhibits), Student Chapters Meeting
			with David Seppala-Holtzman, St. Joseph's College, and
			Department Liaisons Meeting with Raymond N. Greenwell, Hofstra University
1:30	—	2:00 PM	Business Meeting
2:10	-	3:00 PM	Presentation: Counting on Determinants ⁴ by Arthur T. Benjamin, Harvey Mudd College
3:10	_	5:10 PM	Contributed Paper and Poster Sessions (see final program)
¹ Se	e pa	ge 9 for Abstrac	t and brief Bio of Joseph Gallian

² See page 10 for a brief description of the panel

³ See page 10 for a description of presentation and brief bio of Luise-Charlotte Kappe

⁴ See page 9 for Abstract and brief Bio of Arthur Benjamin

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 2006 Spring Meeting to be held on Sunday, May 7 at Dowling 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. We will also have a *Poster Session*, something new for 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 2006 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 mantell@ncc.edu by Monday, April 3 for full consideration. All abstracts will be examined by a committee of reviewers. The outcome of their deliberations will be announced by mid-April. <u>Please be certain to clearly indicate your preference</u> 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 2006 Spring Meeting, please contact Abe Mantell (mantell@ncc.edu).

Using Groups and Graphs to Create Symmetry Patterns

Joseph A. Gallian, University of Minnesota Duluth

We use video animations to explain how Hamiltonian paths, spanning trees, cosets in groups, and factor groups can be used to create computer generated symmetry patterns in hyperbolic and Euclidean planes. These methods were used to create the image for the 2003 Mathematics Awareness Month poster.

Brief Bio of Joseph A. Gallian

Joe Gallian received a Ph.D. from Notre Dame in 1971. He has been at the University of Minnesota Duluth since 1972. He is the author of the book *Contemporary Abstract Algebra* (6th edition) and coauthor of the book *For All Practical Purposes* (7th edition). His research interests include groups, graphs and combinatorics. He has published more than 90 articles and given over 200 invited lectures at colleges, universities and conferences. He has directed summer research programs for undergraduate students since 1977. He has received teaching awards from the MAA, the Carnegie Foundation and the University of Minnesota. Besides the usual math courses, he teaches a Humanities course called the *The Lives and Music of the Beatles* and a liberals arts course on math and sports. He is President-Elect of the MAA.

Counting on Determinants

Arthur T. Benjamin, Harvey Mudd College

We demonstrate how determinants solve many interesting combinatorial problems, and how many interesting theorems about determinants can be viewed by simple counting arguments. Applications to Pascal's Triangle, Fibonacci numbers and Catalan numbers will also be given. We end with a new combinatorial proof of Vandermonde's determinant.

This talk is based on joint work with Naiomi Cameron of Occidental College and Gregory Dresden of Washington and Lee University.

Brief Bio of Arthur T. Benjamin

Arthur Benjamin earned his B.S. in Applied Mathematics from Carnegie Mellon and his PhD in Mathematical Sciences from Johns Hopkins. Since 1989, he has taught at Harvey Mudd College, where he is Professor of Mathematics and past Chair. In 2000, he received the Haimo Award for Distinguished Teaching by the Mathematical Association of America.

His research interests include game theory and combinatorics, with a special fondness for Fibonacci numbers. Many of these ideas appear in his book (co-authored with Jennifer Quinn), *Proofs That Really Count: The Art of Combinatorial Proof*, published by the MAA. In 2006, that book received the Beckenback Book Prize by the MAA. Professors Benjamin and Quinn are the co-editors of Math Horizons magazine, published by the MAA.

Art is also a magician who performs his mixture of math and magic to audiences all over the world, including the Magic Castle in Hollywood. In 2005, *Reader's Digest* called him *America's Best Math Whiz*.

Panel: Mathematicians Involved in School Mathematics

As mathematicians become deeply involved again in school mathematics, it is important not only for them to work collaboratively with teachers and mathematics educators, but also for them to try to find common ground within the mathematics community about the presentation of key mathematical ideas in K-12 mathematics and organizing principles for constructing curricula built around these ideas.

Panelists

Roger Howe, Mathematics Professor, Yale University. Recipient of the American Mathematics Society's 2005 Public Service Award for his efforts in school mathematics.

Alexander Karp, Mathematics Education Professor, Columbia Teacher's College. Expert on Russian school mathematics and on the history of school mathematics.

Alan Tucker, Applied Mathematics Professor, SUNY-Stony Brook. Director of the MAA initiative, *Preparing Mathematicians to Educate Teachers*.

Maintaining Your Research In The First Few Years Luise-Charlotte Kappe, SUNY at Binghamton

Coming out of the hothouse atmosphere of finishing one's thesis where research was the only thing that counted and entering the reality of one's first job as a faculty member where there are different priorities comes very often as a shock to new Ph.D.'s. The most pressing need in this is lack of time for such pursuits as doing research, something we all enjoy, otherwise we would not have become mathematicians. Don't give up! Things ease up after the first few years and you don't want to have lost all momentum by then. In this talk I want to address some basic issues on how to keep some of the momentum, such as: Finding time for research, selecting research problems, keeping abreast of research in the area, writing up and publishing your work, finding collaborators, ...

Brief Bio of Luise-Charlotte Kappe

Luise-Charlotte Kappe received her Ph.D. from Universitat Freiburg, in Germany. Dr. Kappe has been at SUNY – Binghamton since 1968 and has advised a dozen Ph.D. students. She is an MAA Project NExT Consultant, Governor of the MAA Seaway Section, and a Member of the Seaway Section NExT Steering Committee since its inception in 1999. Her research interests are group theory (properties of groups, Engel conditions, commutator calculus, supplementation, p-groups, nonabelian tensor products); ring theory (derivations, commutativity conditions in rings); and number theory (transcendental numbers, diophantine approximations).

25 and 50 Year Members

1.7475645946331821906362120355443974034851614366247417581528253507650406235327611798907583626946078899308325815387537105932820299441838280130369330021565993632823766071722975686592380371672038104

The following members will be recognized during the Business Meeting 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*?!!). \textcircled

<u>25 Years</u>: Alice F. Artzt (Queens College – CUNY), Debe Bednarchak (LIU – Brooklyn), Judith Broadwin (Jericho HS, retired), I-Chen Chang (College of Staten Island – CUNY), Lucille Croom (Hunter College – CUNY), Barbara A. Ashton (Borough of Manhattan CC – CUNY), Deborah S. Franzblau (College of Staten Island – CUNY), Tsz Mei Ko, Charles Lipp, Morris Meisner (Kline Institute of Psychiatric Research), Marie H. Postner (St. Thomas Aguinas College).

<u>50 Years</u>: Albert A. Blank (College of Staten Island – CUNY), Abe Gelbart (Syracuse University, retired), Rora F. Iacobacci, Gerald S. Stoller, Margaret A. Zaller (Rosehill International School, retired).

Directions to:

DOWLING COLLEGE Rudolph Campus Idle Hour Blvd. Oakdale, NY 11769

From Southwestern Long Island

Take Southern State Parkway east to Exit 45E (Montauk Hwy, Eastern L.I.). Follow Montauk Hwy (Route 27A) for approximately 2 miles. Pass one traffic light and the Bayard Cutting Arboretum on your right. Continue on Montauk Hwy (27A). Follow 27A (County Rd.85) over railroad bridge to first light (Idle Hour Blvd.). Turn right and proceed to campus gate.

From Southeastern Long Island

Take Sunrise Hwy (Route 27) west to Exit 48 Locust Ave. - Oakdale Bohemia. Follow to Oakdale - Bohemia Rd. Turn left and proceed to end of road, crossing over the railroad tracks of the Oakdale train station. Turn right onto Montauk Hwy (Route 27A, County Rd. 85, Main St.) and proceed west to Idle Hour Blvd. (approximately ¹/₂ mile). Turn left and proceed to campus gates.



From Northwestern Long Island

Take Long Island Expressway (NY 495) east to Exit 53 (Sagtikos Pwy). At the end of the Sagtikos Pkwy bear left follow signs designated, "East - Heckscher State Park." Take Southern State Pkwy east to Exit 45E (Montauk Hwy, Eastern L.I.). Follow Montauk Hwy (Route 27A) for approximately 2 miles. Pass one traffic light and the Bayard Cutting Arboretum on your right. Continue on Montauk Hwy (27A). Follow 27A (County Rd. 85) over railroad bridge to first light (Idle hour Blvd.). Turn right and proceed to campus gates.

From Northeastern Long Island

Take Long Island Expressway (NY 495) west to Exit 62 (Nicolls Rd.). Go south on Nicolls Rd. to Sunrise Hwy (Route 27). Turn right onto Sunrise Hwy (Route 27). Take Sunrise Hwy (Route 27) west to Exit 48 Locust Ave. - Oakdale Bohemia. Follow to Oakdale - Bohemia Rd. Turn left and proceed to end of road, crossing over the railroad tracks of the Oakdale train station. Turn right onto Montauk Hwy (Route 27A, County Rd. 85, Main St.) and proceed west to Idle Hour Blvd. (approximately1/2 mile). Turn left and proceed to campus gates.

From Queens and Brooklyn

Take Southern State Pkwy east to exit 45E (Montauk Hwy, Eastern LI), and proceed according to the directions from Southwestern Long Island above.

From Bronx, Westchester and Points North

Take Throgs Neck Bridge to the Cross Island Pkwy (Eastern Long Island). Proceed south on Cross Island, following signs for Southern State Pkwy. Go east on Southern State to exit 45E (Montauk Hwy, Eastern LI), and proceed according to the directions from Southwestern Long Island above.

From Staten Island, New Jersey and Points South

Take Verrazano Bridge and proceed east on the Belt Pkwy, following signs for the Southern State Pkwy. Go east on Southern State to exit 45E (Montauk Hwy, Eastern LI), and proceed according to the directions from Southwestern Long Island above.

By Railroad

The Oakdale Station on the Long Island Railroad's Montauk line is approximately one mile away from the Rudolph Campus. Taxis are available at the station at all times. For schedule and fare information, call (631) 822-5477 or visit http://www.lirr.org. The current LIRR schedule has a train leaving Penn Station at 7:27 AM, arrives at Jamaica at 7:47 AM, then Oakdale at 8:46 AM. The next train afterward will not get to Oakdale until about 10:45 AM. Dowling will have shuttles running from the Oakdale train station to campus. Check the LIRR schedule after March 5th for any changes.

By Bus

Call Suffolk County Transport (631-473-0286) for fare and schedule information. The S-40 Bus stops at the Oakdale Train Station and at the intersection of Idle Hour Blvd. and County Rd. 85 (Montauk Hwy), which is approximately 1/4 from the campus.

2006 SECTION MEETING REGISTRATION FORM

First Name:	M.I.:	Last Name:	
Badge Name or Nic	ckname:	Affiliation:	
Address:			
City:		State:	Zip+4:
Phone Numbers: I	Day:	Eve:	Fax:
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The MAA national of Current MAA Memb	office requests the follov	wing information. P	lease check the appropriate responses.
High School St	tudent Uno	dergraduate Studen	t Graduate Student
High School Te	eacher 2-Y	ear College Faculty	4-Year College Faculty
University Facu	ulty	Business	s/Industry/Government Employee
Other (please s	specify)		
Registration	i Fee: On/Before 14 Ap	oril \$ 5.00	
	After 14 Ap	oril \$10.00	
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* 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:

Dean Nataro Department of Mathematics Nassau Community College Garden City, NY 11530-6793

SECTION ELECTIONS – Please VOTE!!!

We received the following nominations for the offices indicated. Please send completed ballots (page 15) to Dean Nataro. <u>Note</u>: The annual meeting registration and this ballot both go to Dean Nataro. If you want anonymity for your votes, then photocopy the ballot and enclose it in a separate envelope with the word **BALLOT** in large print. **DEADLINE**: April 14.

Candidate for Chair-Elect

Farley Mawyer, York College (CUNY)

Farley Mawyer received his Ph.D. from CUNY under the direction of Harvey Cohn in 1980. Since that time he has been teaching at York College where he is now a professor of mathematics. He has been active in Metropolitan NY Section activities for over 20 years. He was the section secretary between 1991 and 2000. He has also been a candidate for vice-chair for four-year colleges and for section governor. In 2003 he was the recipient of the Section's Distinguished Service Award.

Candidates for Secretary

Emad Alfar, Nassau Community College (SUNY)

Emad Alfar received his B.A. and M.S. in mathematics from California State University. He has been an active member of the Metro NY Section for several years. He served as Vice-Chair for Two-Year Colleges, Co-Chair of the Distinguished Service Award Committee, and Co-Chair of the Organizing Committee for the Assessment Panel. He serves regularly as a judge of The Al Kalfus Long Island Math Fair.

Henry Ricardo, Medgar Evers College (CUNY)

Henry Ricardo received his B.S. (with honors) from Fordham College and his M.A. and Ph.D. from Yeshiva University. He is a member of Pi Mu Epsilon, Phi Beta Kappa, and Sigma Xi. Currently, he is a Professor of Mathematics at Medgar Evers College. He is a member of the AMS, MAA, NCTM, and SIAM. He is a referee for the *Mathematics Teacher* and for *Mathematics and Computer Education*. His book, *A Modern Introduction to Differential Equations*, was published by Houghton Mifflin in 2002; and he is currently preparing the second edition, as well as writing a linear algebra book. He has been a member of the Metropolitan NY Section for 44 years. He has been the Section's Book Exhibit Coordinator since 1995 and he is currently finishing a term as Secretary.

Candidate for Treasurer

Mohammad Javadi, Nassau Community College (SUNY)

Mohammad Javadi received a Bachelors Degree in Electrical Engineering from SUNY at Stony Brook in 1982, a Masters Degree in Electrical Engineering from Manhattan College in 1986, and a Masters Degree in Mathematics from Adelphi University in 1989. During the past twenty years, he has worked at several colleges throughout the New York Metropolitan area, teaching and tutoring various levels of mathematics. He is currently an Assistant Professor in the Department of Mathematics, Statistics, and Computer Processing at Nassau Community College. Mohammad has chaired and been an active member of several committees at Nassau Community College. He has organized Faculty Development Conferences at the college and made presentations at some of them as well. He has also served as a judge at the Long Island Math Fair for the past six years. Mohammad has been a member of the MAA and a member of NYSMATYC (New York State Mathematics Association of Two-Year Colleges) for the past several years. He regularly attends the Annual Meeting of the Metropolitan New York Section of the MAA. He hopes, at this time, to serve the Metro NY Section of the MAA in the capacity of Treasurer.

Continued ——→

Candidate for Vice-Chair Four-Year Colleges

David Seppala-Holtzman, St. Joseph's College (Brooklyn)

David Seppala-Holtzman received his B.S. from SUNY Stony Brook and his Masters and Doctorate from Oxford University in algebraic topology. Thereafter, he left the U.K. and spent four years teaching at the University of Nijmegen in The Netherlands. He returned to the U.S. in 1981 and became a full-time faculty member at St. Joseph's College in Brooklyn, where he serves as Chair of the Mathematics Department. He joined the MAA almost immediately upon his return to the U.S. and has been a very active and enthusiastic member ever since. He has served (and continues to serve) the MAA on both the local (Section Chair, Section Coordinator for Student Chapters and other positions) and national (Charter Member of the Student Chapter Committee) levels. He is a regular participant in the Section's Speakers Bureau and serves regularly as a judge in the NYC Math Fair. He is a recipient of the New York Metro Section's Distinguished Service Award. He loves mathematics in all its forms and enjoys communicating both its content and his own enthusiasm for it.

Candidates for Vice-Chair Two-Year Colleges

Elizabeth Chu, Suffolk County Community College (SUNY)

Elizabeth Chu received her B.S. degree from the University of the Philippines Diliman and Master's degree from SUNY at Stony Brook. She joined the full-time Mathematics faculty at Suffolk County Community College, Ammerman Campus in 1989. Currently serving as the department's assistant academic chair, Elizabeth also chairs the department's Faculty Development Committee, which organizes activities to help the new mathematics faculty with their teaching and professional growth. She has co-authored a text called Computer Mathematics Concepts and is establishing a mentoring program for mathematics majors.

Elizabeth is a member of MAA, AMATYC, NYSMATYC, and NTCM. She is the MAA liaison and the NYSMATYC campus representative for SCCC. She has presented at the Joint Mathematics Meetings and at the NYSMATYC annual conference. She was co-PI representing SCCC for the multi-year LICIL grant encouraging mathematics across the curriculum. Elizabeth is involved with high school mathematics; she has organized workshops on the Math A and Math B curricula.

Elizabeth enjoys teaching and is a recipient of the SUNY Chancellor's Award for Excellence in Teaching.

Jerry G. lanni, LaGuardia Community College (CUNY)

Dr. Jerry G. Ianni has been a full-time faculty member of the Mathematics Department at LaGuardia Community College since 1993, and he is currently an Associate Professor. He also serves as Chairperson of the College Senate. He completed his Ph.D. in Mathematics, specializing in computational Commutative Algebra, in October 2001 at the CUNY Graduate Center. His current research centers on applications of algebraic structures in music theory.

Dr. lanni has been the liaison from his department to the Metropolitan New York Section since 1999, and he has been a regular participant in sectional activities since that time. He served as Local Organizer for the section's Annual Meeting in 2003. For other Annual Meetings, he has served on and off as Co-organizer of panel discussions, Reviewer of Contributed Papers, and Co-organizer and/or Presider of contributed paper sessions. Dr. lanni is also a member of the section's Math Fair Committee, and he has served as a judge for the Fair on several occasions. In the past couple of years, he has contributed pedagogical articles to the section's newsletter MetroMath and to the MAA Focus. Currently, Dr. lanni is serving as a member of the Organizing Team for the upcoming joint meeting in October 2006 of the Metropolitan New York and Seaway sections.

Continued \longrightarrow

Candidate for Vice-Chair for High Schools

Chris Bergersen, MacArthur High School (Levittown)

Christopher Bergersen received his B.A. in mathematics from Hofstra University, his Masters from Dowling College, and his administration certification from the College of St Rose. He has been a mathematics teacher at MacArthur High School in Levittown for the past nine years, where he currently teaches Precalculus, Mathematics B, and an SAT Preparation course. Chris has worked in coordination with the math faculty of Nassau Community College for the past five years with their partnership program offering SUNY credit to those enrolled in his precalculus classes. In addition to his academic classes, Chris is also the advisor to the Long Island Challenge and Regional Quiz Bowl teams at MacArthur, as well as the junior varsity basketball coach and the varsity lacrosse coach. He looks forward to the opportunity with which he can serve the MAA.

	BAI	LLOT
Metro NY Secti	on of the MAA 2006 I	Elections (Must be received by April 14)
	<u>Cha</u>	ir-Elect
_ Farley Mawyer		Write-in:
	Sec	cretary
_Emad Alfar	Henry Ricardo	Write–in:
	Trea	asurer
_Mohammad Javadi		Write–in:
	Vice-Chair for F	our-Year Colleges
_ David Seppala-Holtzmar	I	Write-in:
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_Elizabeth Chu	Jerry G. lanni	Write–in:
	<u>Vice-Chair fo</u>	or High Schools
Chris Bergersen		Writein:
<u>Day</u> (:	& Location of our May see Message from Section	2 2007 Annual Meeting Survey on Chair on page 4 for more)
_Sunday, May 6, 2007 at Sa	rah Lawrence College	Saturday, May 5, 2007 at
ail completed ballots, as v	vell as annual meeting	registration, by April 14 to:
	Dear Department Nassau Com Garden City	n Nataro of Mathematics nmunity College NY 11530-6793

FEATURED ARTICLE

Recording Metro-New York's Undergraduate Mathematics Program History: A Call For Participants Joe Malkevitch (CUNY – York College), Walter Meyer (Adelphi University),

and Jack Winn (SUNY – Farmingdale)

As part of an ongoing effort to record the evolution of undergraduate mathematics programs, we would like to draw upon the expertise of the membership of the Metropolitan NY Section of the MAA. In particular we are seeking papers on changes that have occurred at the individual mathematics departments within the section over the decades. This could include interviewing long term mathematics educators in the metro region who have observed these changes first hand or played a direct role in effecting the changes in undergraduate mathematics teaching. The role played by the MAA and the Section would be of special interest. Interviews would be in the spirit of "The Princeton Mathematics Community in the 1930s: An Oral-History Project" (http://www.princeton.edu/mudd/math) and historical papers would be in the spirit of Zitarelli, David, In the "Shadow of Giants: A Section of American Mathematicians," 1925-1950, *Mathematics Magazine*, June 2005; Duren, Jr., W.L., "CUPM, the History of an Idea," *The American Mathematical Monthly*, Jan. 1967; and Duren, William, "Mathematics in American Society 1888-1988 A Historical Commentary," *History of Mathematics*, v.2, "A Century of Mathematics in America, Part II," Ed. by P. Duren, R. Askey, AMS, p. 413, 1989.

The Metropolitan New York area has long been a center of research both in mathematics and mathematics education. The region includes such schools as Columbia University, New York University (Courant Institute), the colleges which became City University of New York, SUNY, Teachers College, the US Military Academy, Vassar College, Adelphi, Hofstra, and Marist to name but a few institutions. These institutions draw on a large population of potential students filling many niches (urban, women, elite, "remedial," etc.) Consequently there have been many developments, and individuals involved in these developments, in mathematics, in mathematics education, and in mathematics curriculum which deserve attention by the mathematics community and the history of mathematics community. For example, the mathematicians David Eugene Smith and Morris Kline were involved in curriculum issues and there have been those interested in the reform of Calculus, Liberal Arts Mathematics, etc. from the Metro-New York region.

Unfortunately, in the past not as much attention has been paid to historical issues of curriculum at the undergraduate level as should have been the case. For example, courses such as analytical geometry, foundations of mathematics, and theory of equations while common in the 1950's have died out to be replaced by courses called Precalculus and Linear Algebra, etc. The evolution of what level of exposure undergraduates should be given to applications and mathematical modeling has evolved. Members of our section can make important contributions to understanding this history by researching and writing about, recording and being involved in taking oral histories related to these issues. Doing research of this kind is very rewarding professionally and can lead to journal publications and presentations at Metro-New York MAA meetings and/or national meetings.

If you have an interest in participating in this effort, please contact Joe Malkevitch (joeyc@cunyvm.edu), Walter Meyer (meyer@panther.adelphi.edu), or Jack Winn (winnja@farmingdale.edu).

NEWS FROM OUR SECTION

Nine METRO NY Members Participate in PREP

by Sandra Monteferrante, Dowling College

The *MAA's PRofessional Enhancement Program* (PREP) provides a number of diverse experiences that support growth for mathematicians at all stages of their careers. There are two formats, the seven day PREP Workshop and the ten day foreign study tour. Seven of our members participated in workshops this year.

"Quantitative Literacy experts from across the country united to share their expertise ..." said Lee Fothergill from Mount Saint Mary College. "The workshop was useful for all levels of experience with QL." Lee participated with her colleague Kathy Trim and Gordon Crandall from LaGuardia Community College. This workshop took place from June 14-18 at Macalester College in St Paul, MN. "One highlight ...was guest speaker Bernard Madison ... part of the National Numeracy Network." Lee continued, workshop leaders illustrated how QL could be integrated into the mathematics classroom.

Also in June, Patricia Giurgescu, from Pace University took part in the *Interactive Internet-Based Multivariable Calculus*. Brown University's Thomas Banchoff led this study of the interplay between analysis, algebra and geometry. In that busy month Patricia Sullivan from Mount Saint Mary College attended *Making the Math Visible: explorations in college geometry using the Geometer's Sketchpad*. Held at Bellarmine University, KY, this was led jointly by Bill Fenton and Sr. Barbara Reynolds.

In July, Frances Weiner, of Midwood HS in Brooklyn, joined the *Post Calculus Investigations of Statistical Concepts and Methods* workshop held at California Polytechnic State University. Allan Rossman and Beth Chance whose goal was to help participants adapt current content and pedagogical recommendations from algebra-based introductory statistics courses to the post-calculus level, providing mathematically inclined students with a more balanced introduction to the discipline of statistics.

Finally, Dwight Pierre, of the Borough of Manhattan Community College, prepared for the challenge of student mathematical deficiencies by attending *Revitalizing Your Developmental Mathematical Course: a context driven, activity-based approach.* Nancy Crisler and Gary Simundza held this workshop at the UC Berkeley.

Lastly, Bob Bumcrot, retired from Hofstra University, and this author enjoyed the mysteries of the Ancient Maya on the annual MAA study tour to the Yucatan Peninsula of Mexico. Interested readers can find participant testimonials in the September issue of *Focus* and in the November issue, Jacqueline Dewar's article, "The Land of the Maya."

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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 24, 2006 at Hofstra University. The Suffolk first round will be held on Friday, March 17, 2006 at Half Hallow Hills HS (East & West). The final round is Friday, April 28, 2006 at Hofstra University. All rounds begin at 3:00 p.m. For more information, call Joseph Quartararo at (631) 584-2016.

Greater Metropolitan New York Math Fair: Call for Judges

The thirty-eighth Greater Metropolitan New York Math Fair will take place on March 5, 2006 and April 2, 2006 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 been given copies of the papers. During Round 1 (March 5, 2006) the judges decide which contestants advance to Round 2 (April 2, 2006). 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.

A judge application can be found on the Section web-page (www.maa.org/metrony). If you would like to judge in this year's FAIR fill in the application and return to Peter Shenkin 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 Peter Shenkin for further information – E-mail: pshenkin@jjay.cuny.edu, Phone: (212) 237–8925.

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 47 th 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) 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 Dan King at dking@slc.edu.

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

Thirty-nine Newton Fellows are getting master's degrees in math education at NYU and Teacher's College / Columbia University in preparation for careers as New York City high school math teachers, a position their ten predecessors from the 2004 cohort have already taken up. Newton Fellows receive full tuition scholarship to a master's program, \$90,000 in stipends, and membership in the Newton Corps, which provides them with mentoring, coaching, and support while they teach math in NYC for four years. Help spread the word: encourage anyone with a passion for math and the desire to teach it to apply for a Fellowship. Details can be found on www.mathforamerica.org.

Call for Submissions!!!

Manhattan College will host an Undergraduate Mathematics Conference on March 25, 2006. The goal of this conference, called the *Spuyten Duyvil Undergraduate Mathematics Conference*, is to offer undergraduates the opportunity to attend and actively participate in a professional mathematics meeting, and more broadly, to encourage mathematical conversation among undergraduates. Registration for the one-day conference will be free, and lunch will be provided.

Talks may range from expository talks, understandable by freshmen and sophomores, to presentations of results from summer research experiences. Please encourage your undergraduates to consider making a presentation. Learning about a new area of mathematics and giving a fifteen minute presentation on it can develop confidence, encourage undergraduates to undertake research, or to pursue additional courses in mathematics. Presentations by teams of students, by faculty, or presentations of material from closely related fields are also welcomed.

The Conference will feature a Keynote address by Prof. Fred Rickey of USMA, and two concurrent panel discussions, one on research by undergraduates, and one on careers for mathematics majors.

Prof. Rickey will speak on

The Bernoulli Brothers and the Calculus

Abstract: The 1690s were the decade when the calculus was formed. It was a decade of seminal problems, great mathematics, fascinating personalities, and bitter guarrels. The first papers on the calculus were published in the 1680s by Leibniz and the first individuals to truly master them were the Bernoulli brothers, Jakob (1654-1705) and Johann (1667-1748). As soon as they absorbed these aroundbreaking papers they did what all good mathematicians do: they posed new questions. answered them, communicated their results, and initiated students into the newest mathematics. Through a sketch of the lives of these fascinating individuals, we shall see how their cooperative work led to intellectual competition and then to brotherly hate. Through a survey of their scientific work, we shall contributions thev made to mathematics. see what areat including the brachistochrone problem and L'Hospital's rule. Through a detailed look at several of the problems they created, we shall see how their work can be used in our classrooms today, including the origin of "integral," and several interesting elementary calculus problems the word of а geometric nature.

For more information, please email Kathryn.weld@manhattan.edu. To submit an abstract for a talk, or to register for the conference, please visit the website www.manhattan.edu/conferences/sdumc.

Funding for this conference is partially provided by NSF grant DMS-0241090 through the MAA Regional Undergraduate Mathematics Conferences Program, www.maa.org.

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 2006 Spring Meeting to be held on Sunday, May 7 at Dowling 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.

MetroMATH Needs You!!!

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

EVENTS CALENDAR

Greater Metropolitan New York Math Fair 2006

March 5, Sunday, (Round 1) Pace University in Manhattan April 2, Sunday, (Round 2) Pace University in Manhattan For more information contact Peter Shenkin at (212) 237–8925 or e-mail at pshenkin@jjay.cuny.edu or check the section web-page for more info and the judging request form.

Al Kalfus Long Island Math Fair 2006

March 17, Friday, (Round 1 – Suffolk County) Half Hollow Hills HS (East & West) March 24, Friday, (Round 1 – Nassau County) Hofstra University April 28, 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.

NYSMATYC Annual Conference • April 7-9, 2006, Holiday Inn Cortland, Cortland, NY For more information visit: www.nysmatyc.org/conf2006

MAA New Jersey Section Spring Meeting

April 8, 2006, Georgian Court College, Lakewood, NJ For more information visit: www.maa.org/newjersey

Hudson River Undergraduate Mathematics Conference XIII

April 8, 2006, Westfield State College, Westfield, MA For more information visit: www.skidmore.edu/academics/mcs/pages/hrumc13in.htm

AMS Eastern Section Spring Meeting

April 22-23, 2006, University of New Hampshire, Durham, NH For more info visit: www.ams.org/amsmtgs/2126_program.html

- NCTM Annual Meeting and Exposition April 26-29, 2006, St. Louis, MO For more info visit: www.nctm.org/meetings/stlouis/
- MAA Seaway Section Spring Meeting April 28-29, 2006, Ithaca College, Ithaca, NY For more information visit: www.maa.org/seaway
- Metropolitan New York Section Meeting May 7, 2006, Dowling College, Oakdale, NY For more information see this newsletter, or visit: www.maa.org/metrony
- 2nd Cornell Probability Summer School June 26 July 7, 2006, Cornell University, Ithaca, NY For more information visit: www.math.cornell.edu/~durrett/CPSS2006/
- 2006 SIAM Annual Meeting July 10-14, Boston, MA For more info visit: http://www.siam.org/meetings/an06/index.php
- MathFest August 10-12, 2006, Knoxville, TN Visit: www.maa.org/mathfest/mf06_frontpage.html
- AMS Eastern Section Fall Meeting October 28-29, 2006, University of Connecticut, Storrs, CT For more information visit: www.ams.org/amsmtgs/2133_program.html
- AMATYC Annual Conference November 2-5, 2006, Cincinnati, OH For more information visit: www.amatyc.org/Events/conferences/2006Cincinnati/index.html
- **MAA-AMS Joint Mathematics Meeting** January 4-7, 2007, New Orleans, LA For more information visit: www.maa.org/meetings/national_meetings.html

NEWS FROM THE MAA

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

The Math Gateway - mathgateway.maa.org

In 2004 the National Science Foundation awarded the Mathematical Association of America a Pathways Grant as part of the National STEM (STEM is NSF-speak for Science, Technology, Engineering, and Mathematics) Digital Library (NSDL) Program. This four-year grant is supporting the creation of a portal, The Math Gateway, for undergraduate mathematics materials within NSDL. This project is bringing together collections with significant mathematical content and services of particular importance to the delivery and use of mathematics on the Web.

The Math Gateway project is an outgrowth of the Mathematical Sciences Conference Group on Digital Educational Resources. This group of individuals with an interest in online mathematics has met each year for the past four years at MAA headquarters. Many of the organizations represented at these meetings will participate in the Math Gateway. The initial participating organizations/collections are listed below.

MathWorld (mathworld.wolfram.com) - This extensive math encyclopedia is the work of Eric Weisstein at Wolfram Research.

<u>Math Forum</u> (www.mathforum.org) - The Math Forum is one of the oldest online resources in mathematics with a particular emphasis on K-12 mathematics.

iLumina (www.ilumina-dlib.org) - The iLumina site, hosted at the University of North Carolina at Wilmington, is one of the oldest collections in the NSDL.

<u>CAUSE</u> (http://causeweb.org) - The Consortium for the Advancement of Undergraduate Statistics Education is a project of the American Statistical Association.

<u>Demos with Positive Impact</u> (mathdemos.gcsu.edu) - This project is managed by Lila Roberts of Georgia College and State University and Dave Hill of Temple University. The site provides teachers with demos and accompanying information on how these demos might be used.

<u>National Curve Bank</u> (curvebank.calstatela.edu) - This site, directed by Shirley Gray at Cal State Los Angeles, has a wide range of online mathematical resources including an audio file of Tom Lehrer singing New Math.

<u>Virtual Laboratories in Probability and Statistics</u> (www.math.uah.edu/stat) - This site was developed by Kyle Siegrist at the University of Alabama at Huntsville.

<u>Ethnomathematics Digital Library</u> (www.ethnomath.org) - The Ethnomathematics Digital Library is a project of Pacific Resources for Education and Learning. The Library has links to relevant websites worldwide.

<u>Duke Connected Curriculum Project</u> (www.math.duke.edu/education/ccp) - This site has online materials for lab activities for undergraduate mathematics courses from precalculus through linear algebra, differential equations, and engineering mathematics. Lang Moore and David Smith edit the site.

webODE Project - This project is just getting underway under the direction of Paul Blanchard at Boston University.

Eduworks - (www.eduworks.com) - The MAA and MathDL are cooperating with Geoff Collier and Robby Robson of Eduworks on their NSDL project to improve interoperability and reusability.

<u>WeBWork</u> (webwork.math.rochester.edu) - WeBWork, founded by Arnie Pizer and Mike Gage of Rochester University, is one of the most useful online homework systems for mathematics. MathDL will provide some services for WeBWork.

<u>NSDL Middle School Portal</u> (msteacher.org) - The NSDL Middle School Portal, a project created by the Eisenhower National Clearinghouse, is an online resource for middle school science and math teachers.

<u>College Board</u> (apcentral.collegeboard.com) - At their AP Central site the College Board has a wealth of resources directed toward AP high school teachers. The Math Gateway would link to their resources for calculus and statistics.

<u>Mathematics Survey</u> (www.stat.berkeley.edu/users/mathsurv/) - This project supports the development of online survey journals in the mathematical sciences.

<u>MERLOT</u> (www.merlot.org) - MERLOT provides access to an extensive collection of resources and services over many different disciplines.

Some of these collections include materials related to many disciplines. In that case, the Math Gateway will only link to the mathematics items. The Math Gateway will feature a daily "Math in the News" column and "This Day in Mathematics" (from Convergence) and will appear online at the end of March 2006.

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MASTER OF SCIENCE IN INTEGRATED SCIENCE AND MATHEMATICS EDUCATION

A program that prepares secondary science and mathematics teachers to implement strategies and initiatives of the Department of Education, standards of the National Science Teachers Association and National Council of Teachers of Mathematics, as well as the New York State Systemic Initiative calling for the integration of science, mathematics and technology in secondary curriculum and instruction. Courses in this program include models of the integration of science, mathematics and technology, in-depth investigations in specific academic disciplines, and professional education courses.

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