# The Mathematical Association of America
# New Jersey Section Meeting

**in conjunction with the 10th annual**

# Garden State Undergraduate Mathematics Conference

**Felician College**
**Lodi, NJ**

**Saturday, April 13, 2013**

# Abstracts and Biographies of Speakers

## Lessons from the $1,000,000 Netflix Prize

Robert Bell, AT&T Labs-Research

In October 2006, the DVD rental company Netflix released more than 100 million user ratings of movies for a competition to predict new ratings based on prior ratings. The size of the data (over 17,000 movies and 480,000 users) and the nature of human-movie interactions produced many modeling challenges. One allure to data analysts around the world was a $1,000,000 prize for a team achieving a ten percent reduction in root mean squared prediction error relative to Netflix's existing algorithm. Besides producing a photo finish worthy of a movie, the 33-month competition spurred numerous advances in the science of recommender systems and machine learning, more generally.

After describing some of the techniques used by the leaders, I will offer lessons and raise some questions about building massive prediction models; the role of statistics, computer science, and mathematics in such endeavors; and prizes as a way to advance science. This is joint work with Chris Volinsky and Yehuda Koren, current and former colleagues at AT&T Labs-Research.

**Robert Bell** received a Ph.D. in statistics from Stanford University in 1980. After spending 18 years at RAND doing public policy analysis, he joined the Statistics Research Department at AT&T Labs-Research. His research interests range from machine learning methods to survey research methods. He was a member of the team that won the Netflix Prize competition in 2009. Dr. Bell has served on the Fellows Committee of the American Statistical Association, the board of the National Institute of Statistical Sciences, the Committee on National Statistics, and several National Research Council advisory committees studying statistical issues from conduct of the decennial census to geographic variation in health care spending.

# The Mathematics of Doodling

Ravi Vakil, Stanford University

Doodling has many mathematical aspects: patterns, shapes, numbers, and more. Not surprisingly, there is often some sophisticated and fun mathematics buried inside common doodles. I'll begin by doodling, and see where it takes us. It looks like play, but it reflects what mathematics is really about: finding patterns in nature, explaining them, and extending them. By the end, we'll have seen some important notions in geometry, topology, physics, and elsewhere; some fundamental ideas guiding the development of mathematics over the course of the last century; and ongoing work continuing today.

**Ravi Vakil** is a Professor of Mathematics at Stanford, where he is also the Robert K. Packard University Fellow and the David Huntington Faculty Scholar. He is an algebraic geometer, and his work touches on many other parts of mathematics, including topology, string theory, applied mathematics, combinatorics, number theory, and more. He was born in Toronto, Canada, and studied at the University of Toronto, where he was a four-time winner of the Putnam competition (``Putnam Fellow''). He received his Ph.D. from Harvard in 1997, and taught at Princeton and MIT before moving to Stanford in 2001. He has received the Dean's Award for Distinguished Teaching, the American Mathematical Society Centennial Fellowship, the Frederick E. Terman fellowship, an Alfred P. Sloan Research Fellowship, the NSF CAREER grant, and the Presidential Early Career Award for Scientists and Engineers. He has also received the Coxeter-James Prize from the Canadian Mathematical Society, and Andre-Aisenstadt Prize from the CRM in Montreal. He was the 2009 Earle Raymond Hedrick Lecturer at MathFest, and is the Mathematical Association of America's Pólya Lecturer for 2012-2014. He has served as an informal advisor to the new website mathoverflow. He works extensively with talented younger mathematicians at all levels, from high school (through math circles, camps, and Olympiads), through recent Ph.D.'s.

# Mathematics to DIE for:
# The Battle Between Counting and Matching

Jennifer Quinn, University of Washington – Tacoma

Positive sums count. Alternating sums match. So which is "easier" to consider mathematically? From the analysis of infinite series, we know that if a positive sum converges, then its alternating sum must also converge but the converse is not true. From linear algebra, we know that the permanent of an $n \times n$ matrix is usually hard to calculate, whereas its alternating sum, the determinant, can be computed efficiently and it has many nice theoretical properties. This talk is one part performance art and three parts combinatorics. The audience will judge a combinatorial competition between the competing techniques. Be prepared to explore a variety of positive and alternating sums involving binomial coefficients, Fibonacci numbers, and other beautiful combinatorial quantities. How are the terms in each sum concretely interpreted? What is being counted? What is being matched? Do alternating sums always give simpler results? You decide.

**Jennifer Quinn** earned her BA, MS, and PhD from Williams College, the University of Illinois at Chicago, and the University of Wisconsin, respectively. She is currently the Associate Director for Interdisciplinary Arts & Sciences at the University of Washington Tacoma where she is working to build a mathematics curriculum on the expanding campus with shrinking resources. Prior to joining UW Tacoma, she served as Executive Director of the Association for Women in Mathematics and before that, spent more than a decade as a faculty member at Occidental College in Los Angeles.

Jenny's professional focus is combinatorics with a special fondness for Fibonacci numbers. She believes that beautiful proofs are as much art as science. Simplicity, elegance, and transparency should be the driving principles. Jenny credits much of her success to amazing opportunities at the MAA and a strong collaboration with Arthur Benjamin. Together they co-authored the book, *Proofs That Really Count: The Art of Combinatorial Proof* (published by MAA and winner of the 2006 Beckenback Book Prize) and co-edited MAA's *Math Horizons* from 2003-2008. An award winning scholar and teacher, perhaps her proudest MAA moment was

receiving the Haimo Award for Distinguished College or University Teaching in 2007. She is currently Second Vice President of the MAA.

## Abstract of Workshop

Most mathematicians appreciate clever combinatorial proofs. But faced with an identity, how do you create one? This workshop will provide you with some useful combinatorial interpretations, lots of examples, and the challenge of finding your own combinatorial proofs. Your mantra should be "keep it simple."

## Abstracts of MAA-NJ Contributed Paper Sessions

### Session 1: Mathematics and Planet Earth

Obal Hall room 303. Organizers and presiders: Srabasti Dutta, Ashford University; Patricia Kenschaft, Montclair State University

11:00 – 11:15: **Summary of Presentations on Climate Change**
Author: Dr. Patricia Kenschaft, Montclair State University

This will be a summary of the presentations on climate change at the 2008 JMM. It included invitations for mathematicians to join in research projects of scientists, and reports on some simplified models available to undergraduates.

11:20 – 11:35: **Project-based learning in operations research and sustainability**
Author: Ian Frommer, Ph.D., US Coast Guard Academy

Operations research (O.R.), the use of quantitative methods to aid in decision-making, is playing an increasingly important role in addressing sustainability challenges such as greenhouse gas reduction and renewable energy use. In this talk, quantitative sustainability projects that can be utilized in undergraduate courses are described using the lens of descriptive, predictive, and prescriptive analytics recently espoused by the O.R. community.

**Session 2: Statistics Practice and Pedagogy**

Obal Hall room 304. Organizer and presider: Dex Whittinghill, Rowan University

11:00 – 11:15: **The M-tile Means, A New Class of Measures of Central Tendency: Theory and Applications**
Authors: David DiMarco, New York University, and Ryan Savitz, Neumann University; Presenter: David DiMarco, dd61@nyu.edu

A new measure of central tendency, the quartile mean, is introduced and is generalized to a class of measures, called m-tile means. These new measures were motivated by the authors' desire to find a measure of central tendency that was not only resistant to outliers, but also resistant to undue changes incurred by altering a small number of data values, regardless of whether or not they would be considered outliers. The new class of measures introduced in this paper not only meets the aforementioned criteria but compares favorably to extant measures of central tendency in regards to other properties as well.

11:20-11:35: **Statistical Detection of Data Fabrication**
Authors: Joel Pitt, Georgian Court University, and Helene Z. Hill, UMDNJ; Presenter: Joel Pitt, pittj@georgian.edu

Statistical techniques can be used to uncover fabrication of laboratory and other data. Unusual irregular patterns and/or unusual regular patterns in numeric data can indicate that data has been fabricated. For example, the terminal digits of certain kinds of counts are often relatively insignificant and not under the control of the investigator. In such situations there is often reason to expect that those digits will exhibit a uniform distribution and the chi-squared goodness of fit test can be used to test conformity to that expectation. We applied several standard and newly developed techniques in a review of radio biological data sets produced by eight different investigators in one laboratory at UMDNJ. Data sets produced by one investigator exhibited unusual patterns of several types, none of which appeared in the data sets of other investigators. We developed a new probabilistic model to assess the likelihood that one rather unusual regularity might have

occurred by chance, and an Excel workbook that could automate several of the analytic tools we employed.

**Session 3: STEM Programs**

Obal Hall room 303. Organizer and presider: Chengwen Wang, Essex County Community College

11:40 – 11:55: **Blood flow in a patient-specific stenotic right coronary artery**
Author: Biyue Liu, Monmouth University

The blood flow in a stenotic human right coronary artery is investigated by a computer simulation using an unsteady three-dimensional model based on patient-specific plaque geometry. The spatial and temporal patterns of the blood pressure and the wall shear stress will be presented based on the simulation results. The objectives of the study are to simulate the blood flow and to examine the local flow pattern and the hemodynamic environment in atherosclerotic right coronary artery.

12:00 – 12:15: **LSAMP at Essex County College**
Author: Nadia Lvov, Essex County College, lvov@essex.edu

The Louis Stokes Alliance for Minority Participation (LSAMP) is designed to increase the quality and number of students from under-represented minority groups who complete undergraduate degrees in science, technology, engineering, and mathematics (STEM). This program is funded by the National Science Foundation with the long-term goal of increasing the number of under-represented students who enter STEM professions and who earn doctorates in the STEM fields. LSAMP Alliances across the country are designed to provide support services at many levels to help interested students succeed in STEM majors and careers and to provide networks with other LSAMP Scholars. Essex County College (ECC) is part of the Garden State Louis Stokes Alliance for Minority Participation (GS-LSAMP) and is the only two-year college participating in this grant.

**Session 4: Developmental Math Assessment**

Obal Hall room 304. Organizers and presiders: Kathy Turrisi, Centenary College; Linda Ritchie, Centenary College

11:40 – 11:55: **Abbott and Costello Math**
Author: Robert Search, Centenary College

I discuss the mathematics of Lou Costello's famous "proof" that 7 time 13 equals 28 and the implications of adopting this math in a wider context.

12:00 – 12:15: **Learning Style Preferences of First-Year College Mathematics Students**
Authors: Linda Ritchie, Centenary College; Kathy Turrisi, Centenary College

Our presentation focuses on the results from a three-year observational study of learning style preferences of first-year students who earned a score of 480 or less on their Math SATs. The goal of our study was to assess if there were any patterns or trends in learning preferences for this population of students. As a group, these students were most at-risk for failing college-level math courses.

## Announcements

### MAA-NJ Section 2013 Distinguished Service Award

The recipient of the 2013 MAA-NJ Section Sr. Stephanie Sloyan Award for Distinguished Service is **Bonnie Gold** of Monmouth University.

Bonnie Gold's service to the New Jersey Section of the Mathematical Association of America (MAA-NJ) is outstanding. She is the current Governor of the Section. She has served as Chair (2009-2011), Vice-Chair for Speakers (2006-2008), Chair of the By-Laws Revision Committee that led to the current revised version of the by-laws of the Section, and Founder and First Director of Project NJ-NExT (1998-2008). In addition to talks given at the MAA-NJ Section meetings, her service includes organizing the contributed paper session on "Innovation in Teaching Undergraduate Mathematics" at the Section meeting in March 2012 at Raritan

Valley Community College, and conducting the workshops: “Helping Our Students Learn to Read Mathematics” at the Section meeting in November 2008 at Fairleigh Dickinson University, and “Making mathematics-for-non-majors more attractive” at the MAA-NJ/MAA-MetroNY joint meeting in November 2007 at St. Peter’s College.

Bonnie Gold’s list of service to the national MAA is outstanding and very impressive. She has served on numerous committees including the Committee on Assessment (2011- present: Chair, 2008-2011: Co-Chair), Committee on Articulation and Placement (2001-2007), Committee on the Teaching of Undergraduate Mathematics (1996-2001: Chair, 1995, 1985-1991), Professional Development Committee (1995-2001), Developmental Mathematics Subcommittee —subcommittee of CTUM and CPD — (1995-2001: Chair), and National Steering Committee of Curriculum Action Project — produced *Heeding the Call for Change: Suggestions for Curricular Action*, Lynn Steen, ed., MAA Notes #22, 1992 — (1988-1995). In addition, she has served on the Editorial Board of Illustrative Resources (2004-2007), Spectrum Editorial Board (1991-1995), and Coordinating Council for Education (1996-2001).

Bonnie Gold has organized/co-organized numerous contributed papers sessions and panels including invited paper sessions and minicourses at the annual joint mathematics meetings and MathFest. At the joint mathematics meetings, she co-organized the contributed paper sessions “Philosophy of Mathematics and Mathematical Practice” (2012), “Early Assessment: Find Out What Your Students Understand (and Don't Understand) before They Take the Test” (2012), “Philosophy of Mathematics for Working Mathematicians” (2010), “ ‘I Can't Do Math’: Strategies for Teaching Underprepared, Math-Anxious Students” (co-chaired, 2006), “Philosophy of Mathematics” (2005), “Countering ‘I Can’t Do Math’: Strategies for Teaching Under-Prepared, Math-Anxious Students” (2005), and "Serving the Needs of Developmental Students: Who Are They, Where Do They Come From, Where Do They Go" (2001). In addition, at the joint mathematics meetings, she organized the contributed papers sessions “Philosophy of Mathematics” (2003), and “Assessment for Better Learning” (1997). Further, Bonnie Gold organized the panels “Bringing adjunct faculty abreast of changes in
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**Mathematical Association of America**
**New Jersey Section, Spring 2013 Meeting Program**

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|---|---|
| 8:30 – 9:10 | **Registration;** Obal Hall Lobby<br>**Breakfast;** Second Floor Lecture Hall |
| 8:30 – 1:30 | **Book Exhibits;** Obal Hall Lobby |
| 9:10 – 9:20 | **Welcome by Sr. M. Rosita Brennan**, Provost and VP for Academic Affairs, Felician College; Second Floor Lecture Hall |
| 9:20 – 10:10 | **Lessons from the $1,000,000 Netflix Prize, Robert Bell**, AT&T Labs-Research; Second Floor Lecture Hall. Presider: John Snygg |
| 10:10 – 10:30 | **Business meeting**; Second Floor Lecture Hall |
| 10:30 – 11:00 | **Intermission;** Coffee, Second Floor Lecture Hall<br>**Book Exhibits**; Obal Hall Lobby |
| 11:00 – 12:15 | **Combinatorial Thinking Workshop, Jennifer Quinn**; Obal Hall Room 311 |
| 11:00 – 11:35 | **Contributed Paper Sessions**<br>**Mathematics and Planet Earth**; Obal Hall Room 303<br>**Statistics Practice and Pedagogy**; Obal Hall Room 304 |
| 11:40 – 12:15 | **Contributed Paper Sessions**<br>**STEM programs**; Obal Hall Room 303<br>**Developmental Math Assessment**; Obal Hall Room 304 |
| 12:15 – 1:25 | **Lunch**; Goya Dining Hall (lower level Obal Hall) |
| 1:25 – 2:15 | **The Mathematics of Doodling, Ravi Vakil**, Stanford University; Second Floor Lecture Hall. Presider: Joel Pitt, Georgian Court University |
| 2:15 – 3:30 | **Intermission;** Coffee, Second Floor Lecture Hall<br>Deadline for silent auction/door prizes; Obal Hall Lobby |
| 2:25 – 3:30 | **Student Poster Session**; Obal Hall Lobby<br>**Student talks**; Obal Hall Rooms 308, 309, 310, and 311 |
| 3:35 – 4:25 | **Mathematics to DIE for: The Battle between Counting and Matching, Jennifer Quinn**, University of Washington – Tacoma; Second Floor Lecture Hall. Presider: Tatyana |

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|---|---|
| | Stepanova, Raritan Valley Community College |
| 4:25 – 5:00 | **Prizes and Awards**; GSUMC awards, door prizes, and silent auction winners (must be present to win); Second Floor Lecture Hall |
| 5:00 | **Dinner Honoring Speakers;** Ivy Inn, Hasbrouck Heights |

**Garden State Undergraduate Math Conference**
**Spring 2013 Program**

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|---|---|
| 8:30 – 9:30 | **Registration;** Obal Hall Lobby<br>**Breakfast;** Harmony Hall (lower level Obal Hall) |
| 9:30 – 12:00 | **New Jersey Undergraduate Math Competition**; Harmony Hall (lower level Obal Hall) |
| 12:00 – 1:20 | **Complimentary Student Lunch**; Student Lounge (lower level Obal Hall) |
| 1:25 – 2:15 | **The Mathematics of Doodling, Ravi Vakil**, Stanford University; Second Floor Lecture Hall. Presider: Joel Pitt, Georgian Court University |
| 2:25 – 3:30 | **Student Poster Session**; Obal Hall Lobby<br>**Student Talks**; Obal Hall Rooms 308, 309, and 310 |
| 3:35 – 4:25 | **Mathematics to DIE for: The Battle between Counting and Matching, Jennifer Quinn**, University of Washington – Tacoma; Second Floor Lecture Hall. Presider: Tatyana Stepanova, Raritan Valley Community College |
| 4:25 – 5:00 | **Prizes and Awards**; GSUMC awards, door prizes, and silent auction winners (must be present to win); Second Floor Lecture Hall |
| 5:00 – 7:00 | **GSUMC Tenth Anniversary Celebration Dinner**; Goya Dinihg Hall (lower level Obal Hall) |

**Dinner Honoring the Invited Speakers and Award Recipients**

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

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teaching” (1998), “How an MAA Teaching Consultant can help your department” (1998), and a panel for department chairs (1996); and she co-organized the panels “The intersection of the history and philosophy of mathematics” (2009), "The Philosophy of Mathematics: that which is of interest to mathematicians" (2001),and "Growing an Oak Tree from an Acorn: Extending a New Program from a Few Innovators to the Whole Department" (2001), all at the joint mathematics meetings. At MathFest, Bonnie Gold co-organized the panels “Assessing Mathematics Courses for Students in Business, Education, Engineering, and Nursing” (participated, 2011), and "Teaching Collaborations between 2-year and 4-year Colleges" (1998). She co-organized an invited paper session on the Philosophy of Mathematics at the joint mathematics meetings in 2012, conducted a directed discussion on “What is Mathematics” at MathFest in 2003, and organized a session on "Reading to Learn Mathematics" at MathFest in 2000. She co-organized two minicourses on “Developing Your Department’s Assessment Plan” (2001 and 2004) at the joint mathematics meetings.

Bonnie Gold has given numerous talks at national meetings and MAA section meetings. A list of these talks is omitted in this citation. Another area where she has been very active is participation in panel discussions. At the joint mathematics meetings, she participated in the panels “Alternative Methods of Assessment” (Project NExT, 2010), “Making the Math Major Work for the Under-Prepared Student” (Project NExT, 2008), “Algebra at Various Levels: How does it differ?” (2006), “Publishing Teaching Projects” (Project NExT, 2005), and “How to Assess Problem Solving” (2004). Her participation in the panel “The Nuts and Bolts of Periodic Review”, a panel on the SAUM (Supporting Assessment in Undergraduate Mathematics) project (2002), and a panel on assessment in individual courses for Project NExT took place at MathFest.

We appreciate and are very grateful to Bonnie Gold for her many years of effective and dedicated service to the New Jersey Section of the Mathematical Association of America and the national MAA.

## Call for Nominations for the MAA-NJ Award for Distinguished College or University Teaching

The MAA-NJ Section Distinguished Teaching Award Selection Committee is seeking nominations for the 2014 award. Please consider nominating an inspiring, respected, or influential deserving colleague for this prestigious award. Information about the nomination process and eligibility requirements are posted online http://www.maa.org/newjersey. For additional information you may contact Zhixiong Chen (Secretary, MAA-NJ) at zchen@njcu.edu. Award nominations are due by November 1, 2013.

## Lunch Discussion Tables - Spring 2013 Meeting

Organized by Tom Hagedorn, The College of New Jersey and Theresa C. Michnowicz, New Jersey City University.

- *Statistics at the Undergraduate Level*, led by Robert Bell, AT&T Labs-Research
- *Mathematics and Planet Earth 2013*, led by Srabasti Dutta, Ashford University, and Patricia Kenschaft, Montclair State University
- *Flipping-Out Over On-line Learning Issues*, led by Jennifer Quinn, University of Washington
- *Mathematics as a Liberal Art*, led by Ravi Vakil, Stanford University
- *Department Chair Issues*, led by Dexter C. Whittinghill, Rowan University
- *NJ-NExT table* (NJ-NExT fellows only) organized by John Saccoman, Seton Hall University

Those who pre-registered have priority at these discussion tables.

## Call for Contributed Paper Session Organizers

MAA members interested in organizing a contributed paper session for the Spring 2014 meeting are asked to please submit proposed topics to Theresa C. Michnowicz, New Jersey City University, tmichnowicz@njcu.edu, by Thursday, September 5, 2013.

## Call for Contributed Papers for the Fall 2013 MAA-NJ Meeting

There will be one general contributed paper session at the Fall 2013 meeting. All papers will be reviewed by the selection committee. Please submit the title, a three- to four-line summary, and a one-page abstract in Word to Olcay Ilicasu, Rowan University, ilicasu@rowan.edu, by Friday, September 13, 2013.

## Book Sales at the Meeting

The discounted meeting price for MAA books also applies to books *not* currently on display. When you order books at the meeting, there are no shipping costs.

## Future Meetings

**MAA-NJ.** The Fall 2013 MAA-NJ Section meeting will be held at Rutgers University, Sunday, October 27, 2013. Invited speakers include Annalisa Crannell, Professor of Mathematics, Franklin & Marshall College; Christopher Woodward, Professor of Mathematics, Rutgers University; and Michael A. Jones, *Mathematical Reviews*.

**MathFest.** The Mathematical Association of America will hold its annual MathFest in Hartford, Connecticut from July 31 to August 3, 2013. For further information, go to http://www.maa.org/mathfest/.

**Regional Faculty Workshop on REU-Math Issues.** This one-day workshop is to be held on May 4, 2013 in the Holiday Inn, 1 Route 46 West, Totowa, NJ, starting at 9:30 am. It is for faculty members from New Jersey and the New York Metropolitan area and other states who are interested in REU issues. It includes keynote addresses, group discussions, panel discussions, and breakout sessions. Dr. Joseph Gallian and Dr. Michael Dorff will be the keynote speakers. This workshop is sponsored by NSA Grant Co-13-GSUMC-0113-montclair-2-Li, Montclair State University, and MAA-NJ. A limited number of hotel rooms can be provided on a first-come-first-served basis. Online registration (free) is required. Please visit http://sections.maa.org/newjersey/Workshop.html for more details. For additional questions, please contact Dr. Aihua Li at Lia@mail.montclair.edu.

## Future National MAA Meetings

The 2014 Joint Mathematics Meeting will be in Baltimore, MD on January 15 – 18.
The 2015 Joint Mathematics Meeting will be in San Antonio, TX on January 10 – 13.

## Governor's Report

Although I did write up a report on MathFest 2012 for the fall 2012 program, since the meeting was cancelled, few people saw that program. So I'm including here some particularly important items from MathFest 2012 as well.

The Board of Governors took several significant actions at its meeting on January 8, 2013 at the Joint Mathematics Meetings in San Diego, CA. First, there was substantial discussion of the budget for 2013 because of the continuing budget deficit. The Strategic Plan the governors endorsed at MathFest 2012 included several initiatives that will cost money in the short term (drawing down MAA's reserves) but should result in surpluses within a few years. The Treasurer, Jim Daniels, explained that (1) to put the Strategic Plan in place, we would indeed draw down those reserves, and possibly even have to borrow money in the short term, but that (2) some of the initiatives, such as moving fulfillment (customer service) back to the MAA will pay off very quickly – within at most two years we will be saving money from doing this, and that (3) *if* this all doesn't work, that will be the appropriate time to ask whether we, as an organization, should look into shrinking our mission to make it more in keeping with our decreased membership size. Following this discussion, the Board passed the proposed 2013 budget.

The second significant action was a complete reorganization of the membership dues structure. Currently there are 373 distinct membership categories, each paying different dues. The Membership and Marketing Department has proposed to reduce this to 5 categories: Member, Member Plus, K-12 Teacher, Full-time Student, and Departmental. Within each category dues would include all appropriate electronic journals. Members would have the option of buying print versions of the journals at a discounted rate. Discussion included concern about the disappearance of reduced rates for unemployed mathematicians and retired mathematicians, as well as of discounts for new members. The proposal was

approved “in principle,” with details to be worked out by the staff in consultation with the Membership and Executive Committees.

The third significant item was the approval of the report of the Strategic Planning Working Group on Books, a draft version of which was presented at MathFest, and the final version of which will be posted on the MAA website. The main recommendations involve increasing income from book sales via a range of initiatives. These include hiring an acquisitions editor to allow the MAA pipeline to continue flowing and to seek out books with potential for strong sales (which has already been done: Steve Kennedy, of Carleton College, has been hired); and to seek out new markets, such as textbooks or books that have the potential to be of interest beyond the traditional MAA community.

Other business passed by the board included the re-election of Gerard Venema as Associate Secretary (the person responsible for meetings), confirmation of the Alder Award nominees whose awards will be presented at MathFest 2013, and approval of several motions coming from the Council on Prizes and Awards. These include moving the awarding of the Meritorious Service Awards from the Joint Meetings to MathFest beginning in 2015 and agreeing on guidelines for new prizes and awards.

Ivars Peterson, the Director of Publications, announced a new direction for section book sales. The MAA will produce a kit—“MAA Section Book Sale in a Box”—that offers a recommended procedure for conducting a section book sale, using web-enabled laptop computers or tablets to place orders at the MAA store and a special Section discount coupon code that could also be made available for a short period before and after the meeting on the Section website. They would also produce a custom set of slides, providing basic instructions for online purchases and promoting recent MAA books, which could be posted with the Section meeting announcement on the website and presented at the beginning of the meeting itself. Sections will continue to receive a sampling of books and other items for display.

MathFest 2012: The Board of Governors took several significant actions at this. First, the MAA has been working on a strategic plan, “MAA: Planning for the Second Century.” This document was distributed and approved in principle by the

Board. The purpose of the new document is to refine the MAA's mission in the mathematical sciences community, strengthen MAA's core business operations and existing revenue streams as well as look for new opportunities, and improve the quality and efficiency of its operations.

The Board approved a policy, proposed by the AWIS-MAA Joint Task Force on Prizes and Awards, on avoiding implicit bias in selecting recipients for MAA awards. This policy includes considering diversity of the committee when appointing committee members, working to generate a large and diverse pool of nominees, and taking care during the selection process to avoid implicit bias. Currently the policy can be found at sections.maa.org/avoiding_bias.pdf.

After significant discussion, the Board approved a policy of double-blind refereeing, to avoid implicit bias, for all MAA print journals. Currently only the *College Mathematics Journal* has such a policy. The policy will be implemented as current editors are replaced, so that no current editors are bound by the policy.

By-laws revisions for seven sections were approved: by-laws are on a 10-year cycle for being revised. Ours were last revised in 2005; so we'll need to work on those again soon.

It was announced that the MAA/NCTM joint position on teaching calculus had been approved by the Board by e-mail vote in March; it can be found at maa.org/news/2012_maanctm.html. Numerous selections for positions at the MAA and for speakers, prizes, etc. were announced, including that Brian Hopkins, of St. Peter's University, will be the next editor of the *College Mathematics Journal*, serving through 2018.

Respectfully submitted,
Bonnie Gold, Governor for the New Jersey section

## MAA-NJ Section Officers

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| **Chair** | Carol Avelsgaard, Middlesex County College |
| **Vice-Chair for Speakers** | Thomas Hagedorn, The College of New |

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| | Jersey |
| **Vice-Chair for Innovations** | Theresa C. Michnowicz, New Jersey City University |
| **Vice-Chair for Two-Year Colleges** | Chengwen Wang, Essex County College |
| **Vice-Chair for Student Activities** | Aihua Li, Montclair State University |
| **Secretary** | Zhixiong Chen, New Jersey City University |
| **Treasurer** | Karen Clark, The College of New Jersey |
| **Governor** | Bonnie Gold, Monmouth University |
| **Public Information Officer** | Srabasti Dutta, Ashford University |
| **Program Editor** | Elizabeth Uptegrove, Felician College |
| **Advance Meeting Planner** | Lawrence D'Antonio, Ramapo College |
| **Liaison Coordinator** | Srabasti Dutta, Ashford University |
| **Workshop Organizer** | David Marshall, Monmouth University |
| **Contributed Paper Organizer** | Theresa C. Michnowicz, New Jersey City University |
| **Book Sale Coordinators** | Dirck Uptegrove, Alcatel-Lucent; Elizabeth Uptegrove, Felician College; Paul von Dohlen, William Paterson University |
| **Door Prize Coordinator** | Sarita Nemani, Georgian Court University |
| **GSUMC Co-Directors** | Srabasti Dutta, Ashford University; Olcay Ilicasu, Rowan University; Aihua Li, Montclair State University |
| **Project NJ-NExT Co-Directors** | Kaaren Finberg, Ocean County College; John Saccoman, Seton Hall University |
| **Webmaster** | Paul von Dohlen, William Paterson University |

## MAA-NJ Committees

**Organizing Committee:** Carol Avelsgaard, Middlesex County College; Zhixiong Chen, New Jersey City University; Karen Clark, The College of New Jersey; Larry D'Antonio, Ramapo College; Srabasti Dutta, Ashford University; Kaaren Finberg, Ocean County College; Bonnie Gold, Monmouth University; Thomas Hagedorn, The College of New Jersey; Olcay Ilicasu, Rowan University; Aihua Li, Montclair State University; David Marshall, Monmouth University; Theresa C. Michnowicz, New

Jersey City University; Sarita Nemani, Georgian Court University; John Saccoman, Seton Hall University; Dirck Uptegrove, Alcatel-Lucent; Elizabeth Uptegrove, Felician College; Paul von Dohlen, William Paterson University; Chengwen Wang, Essex County College.

**Awards Committee:** Siham Alfred, Raritan Valley Community College; Larry D'Antonio (chair), Ramapo College; Elizabeth Uptegrove, Felician College; Dexter Whittinghill, Rowan University.

**Nominating Committee:** Mark Korlie (chair), Montclair State University; David Marshall, Monmouth University; Sarita Nemani, Georgian Court University; Tatyana Stepanova, Raritan Valley Community College.

**Teaching Award Committee:** Carol Avelsgaard, Middlesex County College; Bruce Bukiet, NJIT; Bonnie Gold (chair), Monmouth University; Tom Osler, Rowan University; Robert Wilson, Rutgers University.

**Selection Committee for Contributed Papers:** Yi Ding, New Jersey City University; Olcay Ilicasu (chair), Rowan University; Theresa Michnowicz (ex-officio), New Jersey City University; Kathy Turrisi, Centenary College; Chenwen Wang, Essex County College.

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