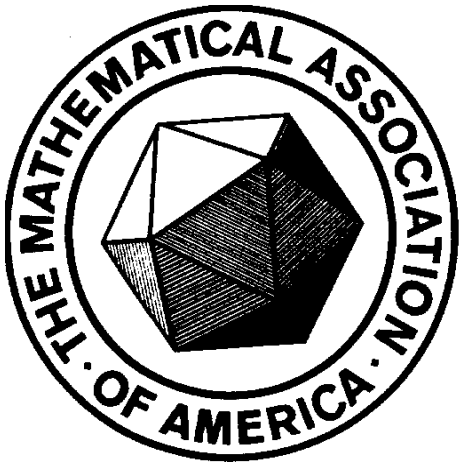
The Mathematical Association of America

New Jersey Section 100th Meeting

in conjunction with the 9th annual

Garden State Undergraduate Mathematics Conference



Raritan Valley Community College
Branchburg, NJ

Saturday, March 31, 2012

Abstracts and Biographies of Speakers

Voting in Agreeable Societies

Francis Su, Harvey Mudd College
(Joint MAA-GSUMC Speaker)

When do majorities exist? How does the geometry of the political spectrum influence the outcome? What does mathematics have to say about how people behave? When mathematical objects have a social interpretation, the associated theorems have social applications. We give examples of situations where sets model preferences, and prove extensions of classical theorems on convex sets such as Helly's theorem and Turan's theorem that can be used in the analysis of voting in "agreeable" societies. This talk also features research with undergraduates.

Francis Edward Su is Professor of Mathematics at Harvey Mudd College, and earned his Ph.D. from Harvard University. His research is in geometric combinatorics and applications to the social sciences, and he has co-authored over a dozen papers with undergraduates. He also has a passion for teaching and popularizing mathematics. From the Mathematical Association of America (MAA), he received the 2001 Merten M. Hasse Prize for expository writing, the 2004 Henry L. Alder Award for distinguished teaching, and was the 2006 James R.C. Leitzel Lecturer. He currently serves as First Vice-President of the MAA. In his spare time he enjoys working on his "Math Fun Facts" website, which receives over a million hits each year, and most recently an iPhone app by the same name.

Folding & Unfolding Convex Polyhedra

Joseph O'Rourke, Smith College

The surface of a convex polyhedron can be cut open and flattened to the plane as a simple polygon. In particular, the unfolding does not self-overlap. So the polygon may be cut out of paper and folded to the polyhedron. It is most natural to restrict the cuts to follow the edges of the polyhedron. It remains an open problem to settle whether or not every convex polyhedron can be cut open to a "net" along edges. Without the edge restriction, there are several methods known to cut open any convex polyhedron to a polygon. I'll describe two recently discovered methods, both based on an idea of Alexandrov from the 1940's.

The reverse process is equally interesting: Given a planar polygon, can it be folded to a convex polyhedron? I will show that every convex polygon folds to an infinite variety of distinct convex polyhedra.

Nonconvex polygons are less well understood. I will show that the standard "Latin-cross" unfolding of the cube refolds to precisely 23 different convex polyhedra.

Joseph O'Rourke is the Olin Professor and Chair of the Computer Science Department at Smith College, a Professor of Mathematics, and Director of Smith's Arts & Technology Program. He obtained his Ph.D. at the University of Pennsylvania in 1980, and taught at Johns Hopkins University for eight years before moving to Smith to found the Computer Science Department.

His research is in computational geometry, developing algorithms for geometric computations. He has won several awards, including a Guggenheim Fellowship in 1987, and the NSF Director's Award for Distinguished Teaching Scholars in 2001. His early research is summarized in the monograph "Art Gallery Theorems and Algorithms." He subsequently wrote a textbook in computational geometry, and co-edited the "Handbook of Discrete and Computational Geometry." Recently he published with Erik Demaine a monograph "Geometric Folding Algorithms: Linkages, Origami, Polyhedra," and he has a new textbook with Satyan Devadoss on "Discrete and Computational Geometry." He has published more than 150 papers in journals and conference proceedings, more than 30 of which were coauthored with undergraduates. His most recent book, "How To Fold It," is accessible to high-school students.

Panel: Issues in Placement

Moderator: **Bonnie Gold**, Monmouth University
Panelists: **Caren Diefenderfer**, Hollins University; **Keith Henry**, The College Board; **Lynne E. Kowski**, Raritan Valley Community College; **Louise Krmpotic**, Maplesoft

This panel will discuss how a student's placement in college mathematics affects the student's success and then we look at two major national placement tests in terms of how they were developed, what audiences they aim at, their flexibility, breadth, ease of use, cost, and other issues identified by members of the section. There will be a substantial amount of time for attendees to ask questions.

Caren Diefenderfer has been a member of the Hollins University Mathematics Department for over 30 years. She was in the first coed class at Dartmouth as

an undergraduate and received her MA and PhD from UCSB. Caren was Chief Reader for AP Calculus from 2004 to 2007 and, during that time, joined the MAA's Committee on Articulation and Placement. She is currently a Co-PI on the MAA's NSF URSIP (Using Research to Shape Instruction and Placement in Algebra and Precalculus) grant.

Keith Henry is The College Board's Senior Assessment Manager serving campuses in the New England Region. He holds a Masters of Education degree from North Carolina State University in Curriculum and Instruction and brings experience in both education and industry to The Board. In his current position, Keith partners with both high schools and higher education institutions to enhance college readiness and success by providing training, service, and support for both ACCUPLACER and CLEP assessment tools.

Lynne E. Kowski is a Professor in the Mathematics Department of Raritan Valley Community College. She has been a full-time faculty member at RVCC for 18 years. She has Master's degrees in Ceramic Engineering and Mathematics Education and is currently pursuing a PhD in Educational Statistics and Measurement. Her thesis focuses on questions such as: Can high school academic performance predict Accuplacer placement? Can college success be predicted by college math placement?

Louise Krmpotic earned her Bachelor and Masters of Mathematics from the University of Waterloo, Canada and a Bachelor of Education from the University of Western Ontario. She is currently the Director of Business Development at Maplesoft and has over 15 years of experience working with technology in all levels of education. Louise was instrumental in the planning and development of the Maple T.A. MAA Placement Test Suite and is an integral member of the Placement Test Project team with the MAA.

Abstracts of MAA-NJ Contributed Paper Sessions

Session 1: General Session
Room S014, Somerset Hall
Organizer and Presider: Lawrence D'Antonio, Ramapo college

1:50-2:05**: Zhixiong Chen, Yi Ding**, New Jersey City University
zchen@njcu.edu, yding@njcu.edu

Advising Undergraduate Students to do Research in Mathematics

We have worked closely as a team with undergraduate students to do mathematical modeling in environmental sciences. We will present our experience in dealing with different issues such as selecting of students, finding appropriate problems, giving appropriate help to students, and presenting the results.

2:10-2:25**: Jonathan Weisbrod**, Rowan University /Burlington County College,
weisbrodj1@verizon.net

Visualizing Dynamical Systems of Polynomials Modulo *n* Using Mathematics

A discrete dynamical system is a set *S* paired with a self-map $\varphi : S \to S$ in which we examine the iterations of $\varphi(x)$ where $x \in S$. This set of iterations is called the orbit of *x*. The objectives of this project are to use the computing capabilities of Wolfram Mathematica to discover patterns that can be examined to create opportunities for research. Using Mathematica, we can easily vary the size of *S*, coefficients of the polynomial $\varphi(x)$, and the element *x* for which we examine the orbit. This topic is appropriate for undergraduate students with a familiarity of modular arithmetic as well as anyone with an interest in experimentation with mathematics programs such as Wolfram Mathematica.

2:30 – 2:45: **Jay Schiffman, Rowan University,** schiffman@rowan.edu

Using Technology To Explore OEIS Sequence A004080

The integer sequence 0, 1, 4, 11, 31, 83, 227, 616, 1674, 4550, 12367, 33617, 91380,… provides the minimal number of terms required for the sum of the terms in the harmonic series to be greater than or equal to the initial n whole numbers. For example, it takes 12367 terms for the sum to be at least ten. It is well known the harmonic series diverges incredibly slowly. This talk will review a few standard proofs, but primarily focuses on the judicious use of CAS Technology (MATHEMATICA and TI CAS Technology) to aid in the exploration of this fundamental series. Eric Weisstein of Wolfram Research has personally verified the accuracy through n = 28 while Tony Noe has expanded this to n = 100. We conclude with exploring the harmonic series of primes proven by Euler to diverge and furnish the minimal number of terms for the sum to exceed the initial three counting integers.

2:50-3:05: **Salilesh Mukhopadhyay**, President and CEO, Feasible Solution LLC
smukhopadhyay@optonline.net

On The Mathematical Foundations of Religion and Ethics

Starting with the algebra of logical propositions by George Boole (1815-1864) an Abelian group { S ; ® } is established for mathematical religion. Furthermore the notion of geometric congruence is extended to the realm of religion and ethics.

Session 2: Innovation in Teaching Undergraduate Mathematics
Room S016, Somerset Hall
Organizer and Presider: **Bonnie Gold**, Monmouth University

1:50 – 2:05: **Sandra Zak**, Georgian Court University, sandrazak@georgian.edu

Teaching Mathematics to In-Service K – 12 teachers

In 2009, I and my co-principal investigators were able to attain an IMPACT Grant to help in-service special education teachers become "highly qualified" in mathematics. Although our audience was in-service teachers, our activities could be adapted for use with pre-service teachers as well. While we had many different successes, this talk will focus on questions of quadratics, which gave us the ideal place to begin to talk of non-constant rates. Using this as a beginning, we slowly helped the teachers to navigate through the difficult concepts of completing the square, deriving the quadratic equation, the division algorithm and the factor and remainder theorems, to name a few.

2:10-2:25: **George Avirappattu**, Kean University, gavirapp@kean.edu

Living Lecture Notes

It has long been a goal of the presenter to capture his lectures live and make them available online to his students. Now he believes he has accomplished it with the help of touchpad computer, appropriate software, a projector, and a website. He will demonstrate what he does in this session. It turns out this combination has potential for a lot more than he initially sought for. Perhaps there are other models for capturing lectures/lessons, Khan Academy for example, the speaker yet has to come across one that is quite like this one.

2:30 – 2:45: **Bonnie Gold**, Monmouth University, bgold@monmouth.edu

Immediate Feedback Techniques: Comparing IF-ATs and Clickers

I have been experimenting with using a range of immediate feedback techniques in my calculus classes for several years. These have ranged from fairly high-tech clickers to low-tech, using colored cards rather than computer response, to IF-AT cards, which I learned about at MathFest last summer. I will discuss my use of them, with examples, and compare what I view as the advantages and disadvantages of each.

Session 3: Math, Statistics, and the Data Deluge
Room S016, Somerset Hall
Organizer and Presider: **Dexter C. Whittinghill**, Rowan University

2:50 – 3:05: **Hieu Nguyen**, Rowan University, nguyen@rowan.edu

This talk describes a data mining approach to finding new mathematical identities by performing a computer-automated analysis of integer sequences derived from the Online Encyclopedia of Integer Sequences (OEIS). An implementation using Mathematica and MySQL will be discussed, along with the challenges of experimentally matching integer sequences and developing efficient algorithms to search a database containing millions of integer sequences.

Session 4: Contributed Papers by Graduate Students
Room S018, Somerset Hall
Organizer and Presider : **Sarita Nemani**, Georgian Court University

1:50-2:05**: Timothy Mink,** Montclair State University**,** tim.j.mink@gmail.com

Entropy bounds on the number of independent sets in graphs

Kahn used entropy methods to bound the number of independent sets in regular bipartite graphs. Zhao used the bipartite double cover of a graph to extend this to all regular graphs. Galvin and Tetali generalized Kahn's result to homomorphisms from a regular bipartite graph to any image graph. In this talk, we use entropy methods to bound the number of independent sets in bipartite graphs with given minimum and maximum degree and use the bipartite double cover to extend to non-bipartite graphs. While our bound is only sharp for regular graphs, it is interesting to note that entropy methods can be applied to non-regular graphs. This work grew out of a conjecture of Galvin and we present some related conjectures that would give better bounds on the number of independent sets in graphs with given minimum and maximum degree. We also note that our methods extend to the number of homomorphisms in general

2:10-2:25**: James Alexander,** Montclair State University,
jamesjosephalexander@gmail.com

The enumeration of independent sets in graphs with various degree restrictions has been a topic of much interest lately. Let i(G) be the number of independent sets in a graph G and let $i_t(G)$ be the number of independent sets in G of size t. Kahn showed that if G is an r-regular bipartite graph with n vertices, then $i(G) \le i(K_{r,r})^{n/2r}$. Zhao extended this bound to all r-regular graphs. Galvin proved that if G is a graph with $\delta(G) \ge \delta$ and n large enough, then $i(G) \le i(K_{\delta,n-\delta})$. In this talk, we show that if G is a bipartite n-vertex graph with $\delta(G) \ge \delta$ where $n \ge 2\delta$, then $it(G) \le i_t(K_{\delta,n-\delta})$ when $t \ge 3$. We note that this result cannot be extended to t = 2 (and is trivial for t = 0, 1). However, in the special case that $n= 2\delta$, we show that the extremal graph, $K_{\delta,n-\delta} = K_{\delta,\delta}$, is the unique maximizer of it even for t = 2, and that this result holds even for non-bipartite 2δ-vertex graphs of minimum degree at least δ.

2:30-2:45: **Stewart Hengeveld**, Montclair State University,
hengevelds1@mail.montclair.edu

Magic Squares of Squares over Finite Fields

In this talk, the speaker will explore some of the characteristics of Magic Squares of Squares over finite fields. This research is based upon an open mathematical problem in recreational mathematics. Existence of non-trivial Magic Squares of Squares (mod p), where p>3, is shown. The possible number of distinct elements of a Magic Square of Squares is discussed. It is shown that over some finite fields, Magic Squares of Squares with 9 distinct elements exist.

2:50-3:05**: Jennifer Feiner,** Montclair State University**,** jennilee727@yahoo.com

Randić and Sum Connectivity Indices of Certain Trees

The focus of the talk is on new developments of the Randić and Sum Connectivity Indices of certain molecular and symmetric trees representing acyclic alkanes, or aliphatic hydrocarbons. A specific type of tree, $T_{n,m}$ trees are investigated. The tree $T_{n,2}$ which has the third smallest Sum Connectivity Index value among all the trees with *n* vertices is found to be interesting and thereby is further explored. Some alkane trees are symmetric, which is the concentration of this talk. The symmetric double star trees are denoted by J_m. The Randić and Sum Connectivity Index formulas of the symmetric tree J_m are developed.

This talk provides a list of observations of the properties of both connectivity indices of the related trees. The graphs which have the maximal or minimal Randić and Sum Connectivity values among all $T_{n,m}$ graphs with *n* vertices are identified. The closeness of the two indices of $T_{n,m}$ trees is also discussed. The Randić and Sum Connectivity Index formulas are given for a very similar tree, denoted $T_{n,m} \times P_r$, extended from the tree $T_{n,m}$ by replacing the middle path P_2 with the path P_r ($r \ge 2$). The symmetric case of tree $T_{n,m} \times P_r$ tree, denoted by $J_{n,r}$, will conclude the talk.

Mathematical Association of America
New Jersey Section, Spring 2012 Meeting Program

8:30 – 9:15	**Registration and Coffee** Grand Conference Center Lobby
8:30 – 1:30	**Book Exhibits** Grand Conference Center Lobby
9:15 – 9:30	**Welcome by Dr. Eileen Abel, Senior VP for Academic Affairs,** Raritan Valley Community College Grand Conference Room C
9:30 – 9:45	***Recognition of 100th Section Meeting*,** Lawrence D'Antonio, Ramapo College Grand Conference Room C
9:45– 10:55	**Panel on Placement Testing** Grand Conference Room C
10:55 – 11:20	**Intermission: Coffee and Book Exhibits** *Lobby of Grand Conference Rooms A and B*
11:25 – 11:40	**Chair's Report, Section Teaching and Service Awards, and Governor's Report** Grand Conference Room C
11:40 – 12:35	**Invited Address:** *Folding & Unfolding Convex Polyhedra,* Joseph O'Rourke, Smith College Presider: Sarita Nemani, Georgian Court University
12:35 – 1:40	**Lunch**: Grand Conference Rooms A and B
1:50 – 3:05	**Contributed Paper Sessions** • **General Session** Room S014, Somerset Hall • **Innovation in Teaching Undergraduate Mathematics** Room S016, Somerset Hall • **Math, Statistics, and Data Deluge** Room S016, Somerset Hall • **Graduate Students Contributed Paper** Room S018: Somerset Hall
3:05 – 3:30	**Intermission:** Deadline for Silent Auction/Door Prizes Lobby Grand Conference Center
3:30 – 4:25	**Invited Address:** *Voting in Agreeable Societies***,** Francis Su, Harvey Mudd College (Joint MAA-GSUMC Speaker) Presider: Tom Hagedorn, The College of New Jersey Room B & C: Grand Conference Center
4:25 – 5:00	**Prizes and Awards,** GSUMC Awards, door prizes, and silent auction winners (must be present to win) Rooms B & C: Grand Conference Center
5:30	**Dinner** honoring the Invited Speakers and Award Recipients

Garden State Undergraduate Math Conference
Spring 2012 Program

8:30 – 9:30	**Registration and Breakfast** Somerset Hall Information Center Lobby **Breakfast:** Cafeteria, College Center 2nd floor
9:30 – 12:00	**New Jersey Undergraduate Math Competition** College Center: C08 , C10, C12, C115, C113, C207 Hunterdon Hall: H111, H14, H116, H118, H120, H122A, H 122B, H123 Somerset Hall: S014, S120, S122, S126, S128, S129, S243, S245, S246, S247
12:00 – 1:30	**Complimentary Student Lunch** Cafeteria, College center 2nd floor
1:40 – 2:40	**Student Talks** Rooms S243, S245, S246, Somerset Hall
1:30 – 3:00 3:00 – 3:30	**Poster Session** College Center, Atrium **Intermission: Coffee and Refreshments** Cafeteria, College Center 2nd floor
3:30 – 4:25	**Invited Address:** *Voting in Agreeable Societies*, Francis Su, Harvey Mudd College Presider: Tom Hagedorn, The College of New Jersey Rooms B & C: Grand Conference Center
4:25 – 4:45	**Contest Results, Awards, and Prizes** Rooms A & B: Grand Conference Center

Announcements

The 2012 Distinguished Service Award

The recipient of the 2011 MAA- Sr. Stephanie Award for Distinguished Service is Patricia Clark Kenschaft of Montclair State University.

Pat Kenschaft has made many outstanding contributions to the New Jersey section of the MAA. She joined the MAA shortly after joining the Montclair State faculty in 1975, but it took a few years until her parenting responsibilities permitted attending a Saturday meeting of the Section. When she did, she enjoyed it immensely, but immediately noticed that there were no women speakers and that there seemed to be very little participation in section meetings by women. She resolved to correct this, beginning by suggesting names for women speakers.

In 1981 Pat put signs around the registration area of a Section meeting announcing a meeting of the Association for Women in Mathematics during lunchtime for those who wanted to discuss women in the New Jersey Section. For many years thereafter AWM had four dinner meetings a year, two following Section meetings and one each in summer and winter in a Westfield restaurant. The latter often attracted women at all stages of life from high school to long-retired who enjoyed animated conversation together. AWM membership rapidly grew and by 1987 New Jersey's was the greatest of any non-university location. The group promoted the inclusion of women speakers at Section meetings. There was no resistance to this movement. At the fall 1992 meeting at Drew University, all the speakers were women.

In 1984 Pat became the Section Vice-Chair for Speakers, an obvious response to her concern for the choice of speakers. She continued on the Section board from 1988-92 as Vice Chair for Innovations and from 1992-94 as Vice Chair for Two Year Colleges. In 2005 she returned to the board for her three-year term as Section Governor.

From 1987 to 1993, Pat was the first chair of the Committee on Participation of Women of the national MAA. There she edited *Winning Women into Mathematics*, written by the Committee and published by the MAA. At national meetings she directed four sets of skits about micro-inequities (slights that are funny on stage but undermine women's careers) that actually happened to women mathematicians. These were followed by well-attended discussions. Meanwhile, Pat chaired the NJ Conference of the AAUP from 1987 to 1991.

From 2001 to 2004, Pat chaired the national MAA Committee on Mathematics and the Environment. From 1998 to 2004, she hosted a live weekly radio talk show "Math Medley" midday Saturdays, where she talked with 300 leaders in mathematical endeavors for an hour each. Pat has published numerous articles and books, including *Change is Possible: stories of women and minorities in mathematics*, published by the American Mathematical Society. Pat received the AWM 2006 Louise Hay Award for Contributions to Mathematics Education at the Joint Mathematics Meetings in San Antonio.

We appreciate and are grateful to Pat for her many years of service to the New Jersey Section of the Mathematical Association of America.

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 2012 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 November 4, 2012.

NJ-Next Workshops
Spring 2012 Program
NExT fellows only

The third and final section of the NJ-NExT Project 2011 will consist of the following three workshops:

8:30 – 9:30	**Creativity in the Classroom: and Assessment** Directed by Kaaren Finberg, Ocean County College
4:30 – 6:00	**Various Teaching Methods and Assessment** Directed by Tracy Saltwick, Bergen Community College
4:30 -6:00	**Behavior in the Classroom** Directed by Susan Monroe, Brookdale Community College

Lunch Discussion Tables - Spring 2012 Meeting

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

1. *Math Apps*, led Francis Su, Harvey Mudd College.
2. *Research with Undergraduate Math Students*, led by Joseph O'Rourke, Smith College.
3. *Assessing Developmental Math Students*, led by Kathy Turrisi and Linda Ritchie, Centenary College
4. STEM Programs in Two-Year Colleges, led by Chengwen Wang, Essex County College
5. Statistics: What's up in your classroom**?** led by Dexter C. Whittinghill, Rowan University
6. Issues in Placement led by Louise Krmpotic, MapleSoft, and Keith Henry, The College Board
7. 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 and Lunch Table Discussion Leaders

MAA members interested in leading a lunch table discussion at the Fall 2012 meeting or organizing a contributed paper session for the Spring 2013 meeting are asked to please submit proposed topics to Theresa C. Michnowicz, New Jersey City University, tmichnowicz@njcu.edu, by **Thursday, September 6, 2012**

Call for Contributed Papers for the Fall 2012 MAA-NJ Meeting

There will be one general contributed paper session at the Fall meeting. All papers will be reviewed by the organizers and the selection committee. Please submit title, 3-4 line summary, and 1 page abstract in WORD by **September 14** to the organizer of the session: Lawrence D'Antonio, Ramapo College of New Jersey, ldant@ramapo.edu

Book Sales at the Meeting

The discounted meeting price of MAA books also applies to books *not* currently on display. Further, when you order such books at the meeting no shipping costs will be charged.

Future MAA-NJ Meetings

- The Fall 2012 MAA-NJ Section meeting will be held at Rutgers University, Sunday, November 4. Invited speakers include Annalisa Crannell, Professor of Mathematics, Franklin & Marshall College
- The Spring 2013 MAA-NJ Section/GSUMC meeting will be held at Felician College, Saturday, April 13.

MathFest 2012

The Mathematical Association of America will hold its annual MathFest in Madison, WI, August 2-4, 2012. More information, including registration and a list of contributed paper sessions, can be found online at http://www.maa.org .

Other Future National MAA Meetings

- 2013 Joint Mathematics Meeting, San Diego, CA, January 9-12, 2013
- 2013 MathFest, Hartford, CT, August 7-9, 2014
- 2014 Joint Mathematics Meeting, Baltimore, MD, January 15-18, 2014

2012 MAA PREP Workshops

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

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.

JOIN THE MAA (http://www.maa.org/membership/join_main.html).

Governor's Report

The MAA Board of Governors had its winter meeting at the Joint Mathematics Meetings on January 3, 2012 in Boston, MA. This was the largest ever Joint Mathematics Meetings with over 7,200 registrants, which is nearly 1,200 registrants over the record-breaking attendance at the 2011 Joint Mathematics Meetings held in New Orleans. In addition to the Board's usual business, it heard reports from the Washington Office, national MAA officers, strategic planning working groups, and editors of MAA publications. Further, it voted on prizes and awards, committees, and conducted elections. Some of the Board's decisions and reports presented at this meeting are given in this report.

Tina Straley retired in December 2011 after completing 12 years as Executive Director of the MAA. She was succeeded by Michael Pearson. Before being approved as Executive Director of the MAA, Michael Pearson served as Associate Executive Director of the MAA under Tina Straley. His term as MAA Executive Director began on January 1, 2012. Tina Straley's twelve years as executive director was celebrated with a reception on Friday, January 6 during the 2012 Joint Mathematics Meetings in Boston.

Francis Su, first vice president of the MAA, and Doug Ensley, second vice president of the MAA, terms will end at the end of January 2012. Lloyd Douglas and Jenny Quinn, who were elected in spring 2011 to these positions, will begin their terms of service on February 1, 2012. In addition, Bob Devaney as president-elect of the MAA will join the Executive Committee and the Committee on Committees and Councils beginning February 1, 2012.

Gerard A. Venema, Associate Secretary of the MAA, reported that MathFest 2012 will be held in Madison, Wisconsin, August 2-4, 2012. In addition to invited paper sessions, contributed paper sessions, panels, and minicourses, there will be the following speakers. Bernd Sturmfels of the University of California at Berkeley will give the Hedrick Lectures; MAA Invited Addresses will be given by Robert Ghrist of the University of Pennsylvania, Rick Kenyon of Brown University, and Amie Wilkinson of Northwestern University; David Mumford of Brown University will give the second joint AMS-MAA invited address; Karen King of New York University will give the Falconer Lecture; and Sylvia Bozeman of Spellman College will give the Leitzel Lecture.

Jim Daniel, the MAA Treasurer, reported that TIAA-CREF Trust Company will be contracted to manage the MAA funds.

The MAA Centennial celebrations will be in 2015. David Bressoud reported that activities during the Centennial celebrations will include special publications, events, and a major fundraising campaign to support MAA activities. The Centennial Planning Committee has set plans in motion for an extended MathFest 2015, to be held in Washington, DC. To help the MAA in celebrating the occasion, the MathFest 2015 meeting will be held in conjunction with the Bridges conference on connections between art and mathematics.

The Board approved the following change in the Deborah and Franklin Tepper Haimo Award for Distinguished College or University Teaching of Mathematics. "This award is to be made to college or university teachers of mathematics who have been widely recognized as extraordinarily successful. No more than three awards shall be made each year.

- At least one of the Award recipients must be a current Section nominee.
- At most one of the Award recipients may be other than a current or past recipient of a Section Award for Distinguished Teaching.

The Section nominee may be the current recipient of the Section Award for Distinguished Teaching or a previous recipient of such an award. The previous award may have been awarded by a Section other than the one submitting the current nomination."

This was my last Board meeting as Governor of the New Jersey Section. However, my term as Governor will continue until the end of June this year. It has been my pleasure and a rewarding experience to serve on the Board of Governors of the MAA, representing the New Jersey Section.

MAA-NJ Section Officers

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

Hosting Committee: Siham Alfred, Lori Austin, Tatyana Stepanova, and Nemanja Nikitovic, Raritan Valley Community College

Awards Committee: Siham Alfred, Raritan Valley Community College; Larry D'Antonio, Ramapo College; Mark Korlie (chair), Montclair State University; Elizabeth Uptegrove, Felician College

Nominating Committee: Mark Korlie, Montclair State University; Hieu D. Nguyen, (chair) Rowan University; Tatyana Stepanova, Raritan Valley Community College; David Marshall, Monmouth University

Teaching Award Committee: Bruce Bukiet, NJIT; Bonnie Gold (chair), Monmouth University; Tom Osler, Rowan University; Robert Wilson, Rutgers University; Kenneth Wolff, Montclair State University

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Acknowledgments

The MAA New Jersey Section thanks the Mathematics Department of Raritan Valley Community College for their kind hospitality in hosting the meeting. They also thank A K Peters, Ltd., CRC Press (Taylor & Francis Group), John Snygg, Princeton University Press, and Springer for donating books for the silent auction and door prizes.

MAA-NJ would like to thank Cengage Learning for their generous sponsorship of the breakfast for the meeting.