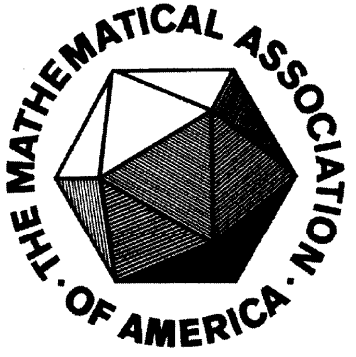
NORTHEASTERN SECTION



NEWSLETTER

Spring 2012

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UPCOMING SECTION MEETING

June 8 and 9, 2012 — Spring Section Meeting
Central Connecticut State University, New Britain, CT.
Local Arrangements: Rachel Schwell, CCSU

FUTURE SECTION MEETINGS

November 16 and 17 2012 — Fall Section Meeting
Bridgewater State University Bridgewater, MA.

Spring, 2013 — Spring Section Meeting
U.S. Coast Guard Academy Groton, CT.

November 22 and 23, 2013 — Fall Section Meeting
Wheaton College Norton, MA.

OTHER ACTIVITIES

June 8, 2012 — Section NExT Meeting
Central Connecticut State University, New Britain, CT.

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Message from the Chair…….Karen Stanish

I am very excited to be writing my first "Message from the Chair." First, I have to say thank you to Rob Poodiack for keeping the section running so well during his time as Chair and for making my transition to Chair so smooth.

We enjoyed a fantastic Fall meeting at Connecticut College on November 18-19, 2011. Thank you to Joe Fields, from Southern Connecticut State University, and his program committee for putting together an engaging program and to Kathy McKeon and her colleagues at Connecticut College for being such wonderful hosts.

We began 2012 with the Joint Mathematics Meetings being held in our section in Boston. The Hynes Convention Center proved to be a great location for the JMM…those not used to the cold never even had to go outside. With the record setting attendance, I know many of you enjoyed the attending the JMM without the plane ride.

I'm looking forward continuing our tour of Connecticut at our Spring meeting at Central Connecticut State University (CCSU) on June 8-9, 2012. huck Rocca, from Western Connecticut State University, and his program committee have put together a dynamic and exciting program. The varied program for the meeting includes invited addresses on the mathematics of musical palindromes, the mathematics of jury size and quota, the history of mathematics, the implementation of the Common Core Standards in the high school curriculum, and more. Phil Sadler from Harvard University will give the Battles Lecture on "Factors Influencing College Success in Mathematics: Predicting Success in College Calculus." In addition, there will be an undergraduate student paper session, a contributed paper session, and a Section NExT meeting. Rachel Schwell and her colleagues at CCSU are working hard on local arrangements. The Spring meeting website can be found at http://www.ccsu.edu/nesmaaspring2012meeting.

In addition to his duties as Past Chair, Rob has taken on the job of moving the section website to the national MAA server. I am thrilled to announce

that the Northeastern Section has a new website at http://sections.maa.org/northeastern. Update your bookmarks today! At this website members can find information about current news, meetings, awards, Section NExT, and more. While Rob has filled the position of webmaster so well that I'm not at all motivated to find a replacement for him, he reminds me that he is the interim webmaster and that the section is looking for a new master. If you or any of your colleagues have interest and expertise in this area, I encourage you to contact me at kstanish@keene.edu.

As we all know, our section if filled with wonderful teachers and it is an honor to be able to recognize Margaret Robinson of Mount Holyoke College as the 2012 winner of the Northeastern Section's Award for Distinguished College or University Teaching. Prof. Robinson will receive her award at the Spring meeting at CCSU and will give an invited address at the fall meeting at Bridgewater State University. Prof. Robinson is now the section's nominee for the national MAA's Deborah and Franklin Tepper Haimo Award for Distinguished College or University Teaching of Mathematics. Congratulations, Margaret!

The Northeastern Section has completed its election of a new section governor. Congratulations to Tommy Ratliff of Wheaton College who will begin his term as section governor on July 1, 2012. Thank you to Ockle Johnson for completing Ed Sandifer's term as governor.

Thank you all for allowing me to serve as your section chair. I hope you all have a relaxing and productive summer, and I look forward to seeing many of you at CCSU in June.

Message from the Secretary-Treasurer ..... Ann Kizanis

In the fall newsletter, I reported a balance of $26,492.36. Since that time, the expenses from the successful and highly attended fall meeting at Connecticut College were $4,944.50. We spent $125.00 on Student Awards for the Problem Solving Contest. The reimbursements for travel totaled $623.83. We also reimbursed $130.00 in student registrations. The total expenses for the fall meeting were $5,823.33, while the revenue from meeting registrations was $5,644.77. We had one late expense of $1,928.76 from the meeting last spring that was submitted. Our Section contributed $270.00 to cover some expenses

for an outreach event at Gordon College. The expenses for the printing and postage of the fall newsletter totaled $1,305.52, and we spent $15.00 on the framing of our Teaching Award. Since the fall newsletter, we earned $99.63 in interest from money placed into an 18 month business CD. Our present balance is $22,894.15.

The total expenses for our fall meeting were $701.33 less than our spring meeting expenses, while the revenue from fall meeting registrations was $1,246.03 more than the revenue from spring meeting registrations. The expenses for the postage and printing of our newsletter last fall increased somewhat from last spring. We spent $749.92 for the printing and postage of the spring 2011 newsletter and $1,305.52 for the printing and postage of the fall 2011 newsletter.

In January, I wrote and submitted our Section's 2011 end of year Financial Report, and at the beginning of the summer, I shall be writing our section's Annual Report.

That is my update for now! We are all looking forward to the Spring MAA meeting at Central Connecticut State University on June 8-9, where I will update you further on our finances. I wish you all a very enjoyable summer!

Two-year College Representative's Report.....Phil Mahler

NEMATYC had its annual meeting at NHTI-Concord's Community College, Concord, NH. Herb Gross was the featured speaker. With a career that went from MIT to Corning CC in Corning New York, to Bunker Hill CC in Boston, Herb was the founder of AMATYC and its New York and New England affiliates. Noteworthy curriculum-wise in community colleges is the development of one-year sequences with no prerequisites that end with credit for a college level gateway course, typically in numeracy or statistics. More description of this well-funded effort, centered on the Carnegie Institute at the University of Texas at Austin can be found by I-searching "Statway".

From the Newsletter Editor..... Frank Ford

We've had two outstanding meetings in this area since the last newsletter.

The big news was the Boston Joint Math Meetings. We set a record for attendance even though the meeting was in a Northern city in January! I was honored to accept the distinguished service award from the Section. In November, we had our Section meeting at Connecticut College and besides an excellent invited speakers' program, we had twenty undergraduate student talks, eight new colleagues talks and seven contributed papers. Congratulations to the coordinators for such an amazing turnout. I thank you again for that. I want to wish Tommy Ratlliff the best of luck as he becomes Governor at the Madison MAthFest. Now we return to Connecticut for our Spring meeting. I hope to see you there.

Student **Presentations at the Fall 2011 Meeting**

Detecting Greatness in a Major League Pitcher
Christian White and Kelsey Erwin, Westfield State University

Isoperimetric Sets of Non-negative Integers
We Ro Jung, Gordon

Maximum Flow in Networks
Lindsay Rae Guilmette, Sacred Heart University

Trigonometric Surprise: Alexander's Angles
Matthew Caputo, Keene State University

A Flexible Server Shipbuilding System Using CONWIP Control
Maya Bam, Gordon College

Geometric Transformations: Direct and Indirect Isometries
Ashley Rodriguez, Sacred Heart University

How Accurate is Fantasy Football?
Stephen Tetrault and Steven Brinker, Westfield State University

Mathematics as an Outlier: A Study on Gender Finds Asymmetry in Salaries for Higher Educationns
Amanda Marsh, Westfield State University

Maximizing the Order of k-regular Graphs with Exponential Dominating set S
Joseph Cyr, Providence College

Can we Divide a Vector by Another Vector?
Sheila Elizabeth Angelica, University of New Haven

Students Health and Test Scores
Elizabet Beauvais, Westfield State University

Magic Squares
Tyler Gray, Lyndon State College

What to Look at When Investing in Companies
Marena Batzanian, Westfield State Univesity

Studying the Efficiency of the No Child Left Behind Act of 2001
Steve Walsh, Wally Malec and Colleen Zocchi, Westfield State University

Crossings of Grphs Embedded on the Unit Circle
Jonathan Godbout, University of Vermont

NHL Goalies-Pure Save %
Eric Pollander and John Hayden, Westfield State University

When Will No Child Be Left Behind?
Libby Boland, Jamie North and Michelle Rizzo, Westfield State University

Some Extensions of Brioschi's Double Alternamt
Emil Lalov, Connecticut College

Propositional Logic in Computer Science
Katelyn Kmiotek, Sacred Heart University

Using Linear Algebra to Analyze Big East Football
Annie Ronquie, Sacred Heart University

Contributed Papers Presented at the Fall 2011 Meeting

On a l-Parameter Family of Singular Matrices
Ramesh Sharma, University of New Haven

The Bayes Rule and Codebreaking
Marina Vulis, Norwalk Community College

Classroom Voting in Teaching Calculus
Fei Xue, University of Hartford

Helping Teachers and Parents Increase Persistence of Minority Students in Mathematics
Senan L. Hayes, Western Connecticut State University

An Introduction to Scratch
Jacob Gagnon, Worcester Polytechnic Institute

Teaching Spherical Geometry to Unvergraduates
Marshall Whittlesey, California State University San Marcos

How Random is the Gender of German Nouns?
Roger Bilisoly, Central Connecticut State University

New Colleagues Talks Presented at the Fall 2011 Meeting

Introduction to Positional Game Theory
Klay Kruczek, Southern Connecticut State University

Introduction to p-Operator Spaces
Jung-Jin Lee, Mount Holyoke College

Vector Coloring of Graphs
Louis Deaett, Quinnipiac University

The Excedance Algebra
Eric Clark, Western New England University

Weak Convergance of Stochastic Integrals Driven by Continuous-time Random Walks
Meridith Burr, Rhode Island College

Math, Mind and Movement
Rebecca Vessenes, Curry College

A Simplified Genus 2 Arithmetic-Geometric Mean for Curves with Split Jacobean
Eleanor Farrington, Massachusetts Maritime Academy

Chromatic Number and Graph Immersion
Megan E. Heenehan, Wesleyan University

NES/MAA Award for Distinguished College/University Teaching of Mathematics Rob Poodiack/Frank Ford

Margaret Robinson of Mouint Holyoke College is this year's winner of the Section's Teaching Award. In Rob Poodiac's letter to her announcing that she won the award, he said "The nomination hailed your work advising a large percentage of Mount Holyoke's math majors, the way your 'teaching empowers (your) students to explore and create their own mathematical ideas,' your work for the IAS Program for Women and Mathematics and the Carleton College summer program. It was said that you 'inspire (your) students to do Herculean amounts of work, and they thank (you) for it afterwards, because (you) help them see how it will transform them.' On the Nount Holyoke web site, there is an announcement of her 2010 Mount Holyoke College Faculty Award for Teaching. In that announcement, her accomplishments in the last eight years are summarized thus: "In the last eight years including sabbaticals, Margaret has taught 22 classes at all levels of the curriculum to over 600 students, including an astounding 14 different course preparations. Her first year courses average over 30 students, her 300

level courses over twenty students. In those same eight years, she has supervised 16 semesters of independent research, written over 200 letters of recommendation, supervised undergraduate research groups three times in the NSF-supported Summer Mathematics Institute, chaired the department for three years, served on the pre-health committee and the advisory committee for tenure and promotions." Her nominators were Harriet Pollatsek and Jessica Sidman. She will recive here award at the Spring Section meeting and will give an invited address at the Fall Section Meeting. Congratulations.

(Ed. Note: Many of us remember Lois Martin who served as the two-year representative for many years. Many of us saw her recently at a meeting and knew she was fighting cancer. Philip Mahler informed us that she lost the battle. He has written this tribute to Lois.)

In Memoriam

Lois Martin was known to many in the section as the Two-Year College Representative for many years, and throughout the New England mathematics community. Lois passed away on January 28 after a long battle with a glioblastoma cancer.

Lois, a Professor of Mathematics at Massasoit Community College, was a renowned mathematics educator. She was awarded the AMATYC Teaching Excellence Award in 2007 (picture at the left), and in 2009 was inducted into the Association of Teachers of Mathematics in Massachusetts Hall of Fame. Because she created its student math league, NEMATYC named its top annual award the "Lois A. Martin NEMATYC Student Mathematics League Award". Lois served on local arrangements for both the 1993 and 2010 AMATYC annual conferences in Boston. Lois also served many years on the NEMATYC Executive Committee, and could always be found at conferences helping in some way. Lois touched and changed many lives. Former students of hers are math educators at Massasoit and Bristol Community College.

Northeastern Section Spring MAA meeting , Project NExT

MAA Northeastern Section Newsletter "Lite"

Spring 2012

Full Newsletter accessible from section website (go to www.maa.org; professional development tab; sections)

CENTRAL CONNECTICUT STATE UNIVERSITY, NEW BRITAIN, CT

SPRING MEETING OF NES/MAA

JUNE 8-9, 2012

Friday, June 8, 2012: NES/MAA Project NExT Program (all full-time untenured faculty are welcome)

12:00 - 2:00 p.m.	**Lunch and Speaker**

Friday, June 8, 2012: NES/MAA Spring Meeting

11:30 - 5:00 p.m.	**Registration in Student Center Lobby**
1:30 – 3:00 p.m.	**Executive Committee Meeting in Sprague-Carlton room, Student Center**
3:00 – 3:50 p.m.	**Palindromes and other Good Questions** **Christine von Renesse, Westfield State University**
4:00 – 4:50 p.m.	**A President, A. Partridge, and Practical Mathematics.** **Dick Jardine, Keene State College**
5:00 – 6:00 p.m.	**Undergraduate Student Papers**
6:00 – 7:50 p.m.	**Reception, and Banquet**
8:00 – 9:00 p.m.	**Battles Lecture: Factors Influencing College Success in Mathematics: Predicting Success in College Calculus** **Phil Sadler, Harvard University**

Saturday, June 9, 2012

8:30 – noon	**Registration in Student Center Lobby**
9:00 – 9:50 a.m.	**Angry Men: Mathematics and the Jury**

	Problem
	Jeff Suzuki, Brooklyn College
10:00 – 10:50 a.m.	**A Changing Landscape for High School Mathematics**
	Marlene M. Lovanio and Timothy Craine
11:00 – 12:00 a.m.	**Business Meeting**
12:00 – 1:00 p.m.	L**unch**
1:00 – 1:50 p.m.	**Render Unto Bernoulli: The Origins and Contents of de l'Hôpital's *Analyse***
	Rob Bradley, Adelphi University
2;00 – 3:00 p.m.	**Contributed Papers**
3:00 – 4:00 p.m.	**iPad Apps for Math: Respond to your math students: quick, light, and mobil**
	Hendree Milward, Tunxis Community College
3:00 – 4:00 p.m.	**Using GAP in an Abstract Algebra course**
	Joseph E. Fields

(All main talks, reception and banquet will be in Alumni Hall, Student Center.)

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