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**NORTHEASTERN SECTION
MATHEMATICAL ASSOCIATION OF AMERICA**

FUTURE SECTION MEETINGS

June 21-22, 2002 (see page xx)

Williams College, Williamstown, MA (joint with Seaway Section)

Program Committee: Frank Morgan, Williams College

Local Arrangements: Frank Morgan, Williams College

November 22-23, 2002

Framingham State College, Framingham, MA

Program Committee Sarah Mabrouk, Framingham State College

Ed Sandifer, Western Connecticut State

Local Arrangements Sarah Mabrouk, Framingham State College

June 13-14, 2003

Massachusetts College of the Liberal Arts, North Adams, MA

Local Arrangements Freda Bennett, MCLA

OTHER ACTIVITIES

Short Course: June 23 - 27, 2002 (see pages 18-21)

Short Course Committee: Will Stout (stout@salve.edu)

Dennis Luciano (dluciano@wnec.edu)

Paul Estes (ple@mail.plymouth.edu)

Dinner Meetings (see pages 21-23)

Coordinator: Lucy Kimball (lkimball@LNMTA.bentley.edu)

Awards: NES/MAA Award for Distinguished Teaching(see pages 12-14)

Distinguished Service Award (see page 14)

Web page: access it via <http://www.maa.org> or directly with
http://scsu.ctstateu.edu/~maa_nes/main.html

webmaster: Ross Gingrich, Southern Connecticut State University,
gingrich@scsu.ctstateu.edu.

**Message from the Chair
Johnson**

Ockle

We in the Northeastern Section have been very fortunate to have a very dedicated core (or is it corps?) of active members and leaders. It is fitting as I begin as chair to acknowledge and thank my predecessor, Ed Sandifer, once again. He has kept the Section running smoothly with some excellent section meetings and programs and kept us in good spirits with his quick wit and good humor. (It's nice to know he's only an e-mail away when I have a question.)

Speaking of excellent section meetings, this fall's meeting at Bridgewater State certainly fits the bill. A very well orchestrated program focused on recreational mathematics and we were treated to enjoyable and informative talks. Well-planned local arrangements included impressive little extras like conference pens and table prizes from Binary Arts at the banquet. Karen Schroeder, Tom Moore and their committees will be a tough act to follow.

But that won't be a problem because we have Frank Morgan as our program chair and host for the spring meeting at Williams College. It looks like a very attractive blend of excellent mathematics, opportunities for camaraderie, and a chance to enjoy spring in the Berkshires. Because it is such an attractive setting, Williams has a very strong summer conference business and is more expensive. Frank has tried to keep the costs down as much as possible by offering two package rates. The most economical includes the room for Friday night at Williams. So consider staying for evening and enjoying the company of your colleagues. In the fall we will return to our usual fee structure.

Our spring meeting this year is a special meeting with our neighbors from the Seaway Section in New York joining us. This was, I believe, originally an idea of Rick Cleary back when he was chair and from St. Mike's could look across the lake to the Seaway Section (correct me if I'm wrong on that). At one point it looked like he would be joining us as a member of the Seaway Section, but we're delighted to have him back in the fold.

Because this is a special meeting with the Seaway Section, there are some variations from our normal routine. To facilitate the organization of contributions from both sections, the student speaker, future colleague and contributed paper sessions will all be coordinated by Victor Hill at Williams. Submissions should be sent directly to him. In the fall, Lisa Humphreys, Mike Cullinane, Phil Hotchkiss, and Tommy Ratliff will resume their respective duties. Also, people like me who wait until the last minute to register need to note the early registration deadline.

Returning to the theme of excellence, the Distinguished Teaching Award Committee was very impressed with the accomplishments and qualifications of all of this year's nominees. While they were all very deserving, we are delighted to announce that this year's Distinguished Teacher is someone who is very well known to us as a tireless worker for the Section, Laura Kelleher. You can read more about her teaching accomplishments later in the Newsletter.

Another treat for this spring is the Short Course. It started as a very well received workshop "Developing Mathematical Modules for the World Wide Web" at last spring's meeting at Norwich University. The participants left clamoring for more. So now fresh from a successful engagement at the Joint Meetings in San Diego, Cathy Frey, Gerard LaVarnway and Rob Poodiak will be offering a short course on "Integrating the Web Into Mathematics Instruction." Paul Estes will serve as our gracious host at Plymouth State College.

Looking ahead to next fall--yes Sarah Mabrouk and Ed Sandifer are already thinking about next fall's meeting, as is Lisa Humphreys who is planning a program for new and relatively new colleagues on Friday morning and afternoon before the section meeting. We hope that this will inaugurate a Northeastern Section Next. So if you're busy hiring now, we hope you'll encourage your new colleagues to join us in the fall.

We have a few additional sites planned, but we will be looking for more. So if you would like to host a meeting or plan a program, let me know. If you haven't done it before, but would like to give it a try, I hope to tap the wisdom and experience of our recent program and local arrangements chairs to develop a new set of guidelines and suggestions. We will also be forming a Nominations Committee for next fall's elections. If you are interested in serving, please let me know.

We do have a program chair and site set for one very special meeting further into the future. Our historian, Jim Tattersall has agreed to serve as program chair for our fiftieth anniversary celebration in November 2005 at the University of New Hampshire where our section began. More on that in coming years, but if you have ideas, pass them along to Jim.

So we have many exciting activities planned--starting with the dinner meetings coordinated by Lucy Kimball later in the semester. Not to mention that the MAA will be coming to our section once again this summer for Mathfest in Burlington, VT! I hope to see you soon

Message from the Governor Donna Beers

For many of us, the trip to attend the Joint AMS/MAA Meetings in San Diego was the first time we had flown since September 11. This made the meeting especially poignant.

The Board of Governors meeting in San Diego was filled with many interesting developments and good news. Here are some highlights:

- Interesting statistics: As of December 31, 2001, the pre-registration for the San Diego Joint Meetings was 3992; also, the MAA's total membership as of this date was 32,558, which 10.70% higher than last year's figure of 29,411; and, 2001 MAA's paid membership was 26,033, which is 15.24% higher than last year's paid membership of 22,591.
- Summer MathFests: The following meeting sites were approved: MathFest 2004: Providence, MathFest 2005: Albuquerque. The Associate Secretary of the MAA, Jim Tattersall, asks everyone to forward him suggestions for future MathFest sites. Please be reminded that MathFests 2002 and 2003 will take place in Burlington and Boulder, respectively. Also, in January, 2003, the Joint Meetings of the AMS and MAA will take place in Baltimore.
- MAA Headquarters: The conversion to the new Association Management software has turned out to be more expensive than expected because of dependence on outside contractors. On the other hand, the software has turned out to be even more powerful than anticipated, so the long term benefit to the MAA is significant. The software is now being used to generate many MAA reports.
- Elections: After serving as Treasurer of the MAA since 1993, Gerry Porter of UPENN has stepped down; John Kenelly of Clemson University was elected by acclamation as the new Treasurer of the MAA. Also, Daniel Maki of Indiana University was elected to four-year terms on the MAA Audit and Budget Committees.
- Professional Development for Faculty: Project PREP (Professional Enhancement Programs) had a successful first year in 2001, offering six workshops in summer 2001. Plans are underway for another strong program in summer 2002. These will include an MAA workshop, Preparing Mathematicians to Educate Teachers (PMET), to prepare college faculty to educate future secondary school mathematics teachers, organized by Ed Dubinsky (see http://www.maa.org/pfdev/prep/dub_app.html); there will also be a professional development program for department chairs, to take place at Towson University, June 27-30. For details on these and other summer 2002 programs, see <http://www.maa.org/pfdev/prep/prep.html>.
- A new SIGMAA on the History of Mathematics has joined the growing number of MAA Special Interest Groups.
- News about Project NeXt: A brochure on Project NeXt has been printed for use with corporate and foundation fund raising. Plans for dissemination include members of the Corporate Foundation Alliance. For 2001-02, the MAA raised \$55,000 in addition to the support of the ExxonMobil Foundation. Currently NeXt Fellows are supported by ExxonMobil Foundation, Dolciani-Halloran

Foundation, Educational Advancement Foundation, the American Mathematical Society, and the GMAA fund.

- The American Mathematics Competitions (AMC): The 17th annual AMC 8 contest was held on November 15, 2001. There were 197,690 students from 2736 schools world-wide who registered for this year's contest. The 53rd annual AMC Contest 12 and the third AMC 10 will be held on Tuesday, February 12, 2002. An alternate contest will be held fifteen days later on Wednesday, February 27. The 20th annual American Invitational Mathematics Examination (AIME) will be held on Tuesday, March 26, 2002. An alternate AIME is scheduled for two weeks later on Tuesday, April 9. All students with a score of at least 100 (out of a possible 150 points) or in the top 5% on the AMC 12, the top 1% of the AMC 10 participants, and students in the top 5% of those participating in the USA Math Talent Search will be invited to take the AIME. The AKAMAI Foundation has contributed \$1,000 scholarships to the top 25 male and the top 25 female scorers, as well as to the top male and top female scorer from each state.
- News about CUPM (The Committee on the Undergraduate Program in Mathematics): CUPM has embarked on the ambitious project of studying the undergraduate program for the first decade of the twenty-first century. This has come to be something we expect from the MAA. One change: In the past, this study has been done by a number of MAA staff. This time, a broader community is engaged with the project, involving more committee members and getting more input from a wider cross-section. Stay tuned. Be looking for progress reports and be willing to provide feedback.
- NSF grants: The MAA has continued last year's track record of successful submissions to the NSF. A proposal to the new NSF Assessment program got funded, a submission for a supplement to the MathDL grant got funded, and a proposal for the MAA to conduct an NSF/DUE PI's meeting also was funded. This meeting will be held in Spring, 2002.
- The Board approved revisions to the Bylaws for the Metro New York and Louisiana-Mississippi Sections.

At home, in the Northeastern Section, Frank Morgan of Williams College has planned a joint meeting of the NES/MAA with the Seaway Section, to take place June 21-22, 2002 at Williams College. A spectacular slate of speakers has been arranged, including Thomas Hales, solver of the Kepler Conjecture; Sean McLaughlin, who proved the Dodecahedral Conjecture; and Thomas Garrity of Williams College whose research is in algebraic and differential geometry and in number theory. Later in the summer, please consider attending MathFest 2002, which will take place at the University of Vermont in Burlington from August 1-3. I look forward to seeing you at these and other upcoming mathematics events.

Message from the Secretary-Treasurer

Ann Kizanis

I gave my last Treasurer's report at the Fall meeting at Bridgewater State College. At this time, our balance was 8,732.42. The meeting at Bridgewater State was very successful, and the income from it was \$5,619 while the expenses were \$5,136.80. We

made \$482.20 from this meeting. Our present balance is \$9,214.62. Note that this balance does not include \$904.14, which is held by the Northeastern Section of the MAA for the summer short course.

I am very pleased that our section is considering an electronic newsletter. This Fall, we spent \$2,364 on both the printing and postage of our newsletter. I am confident that we can save a substantial amount of money over time by introducing an electronic newsletter. In the MAA Sections Report 2000-2001, it was mentioned that several sections have moved toward electronic distribution of their newsletters, and I am happy that we are moving in that direction!

There are a couple other highlights worth mentioning from the MAA Sections Report. We were one of five sections that conducted a Summer or Fall workshop. Moreover, we also stand out for organizing a special section in which new faculty and graduate students are invited to present 20-minute talks on their research or teaching interests.

That's all for now. I'll give another update on our finances at the Spring Meeting at Williams College.

Two-year College Representative's Report

Kathy Bavelas

MATYCONN Spring Meeting on May 10 at Naugatuck Community College in Waterbury, CT. The dinner speaker is a meteorologist. (I do not have his name yet) Texas Instruments will be doing a workshop (with the TI-89, for Precalculus). We're having a FUN dinner -- Bob Lynott and Barbara Caserta are going to do a "Math in the Movies" thing, with film clips! Menu will be salad and pizza!

The AMATYC Input Award deadline date is May 15, 2002. Please consider nominating yourself or a colleague who has developed an exemplary mathematics program that uses technology and uses the Crossroads in Mathematics: Standards for Introductory College Mathematics before

Calculus. For information and nomination materials for this award visit

<http://www.amatyc.org/input/index.html>.

The New England Mathematical Association of Two Year Colleges presents NEMATYC 2002, "Moving Forward, Looking Backward," April 5-6, 2002, at North Shore Community College, Danvers, MA. For more information, visit

<http://www.bristol.mass.edu/nematyc/>.

The Mathematics Basic Skills Committee of Connecticut (with representatives from Central Connecticut State University, Uconn, Community Colleges, and ATOMIC) will present Conference on the Transition from High-school Mathematics to College Mathematics at Central Connecticut State University on Saturday, April 13, 2002. For information, visit the web site <http://155.43.16.5/matyconn/MBSCCFlyer.htm>.

From the Newsletter Editor

Frank Ford

The Northeastern Section has always been blessed with active capable people. In this issue, four of those people are honored for honors they have received recently. Laura Kelleher is this year's winner of the Distinguished Teacher Award. Anyone who has attended a meeting or been actively involved in this Section knows Laura. She has already received the Distinguished Service Award. We may have to invent an award for all the work I know she will still be doing for the Section. Dennis Luciano received the Distinguished Service Award at the San Diego meeting. Again, it is hard to be active in the Section and not interact with Dennis. Two other members of our Section have been honored by other groups. Phil Mahler is the national resident of AMATYC. He provides the Section with a natural way to interact more with the two-year colleges. Clayton Dodge received the MacDuffie award from A 9 + for the years of service he has given them as an editor of the problem section of their journal. Congratulations and thanks to all four of them for working so hard for the good of Mathematics.

This issue also contains information on a very busy schedule of events in the Section. We have the round of Dinner Meetings, meetings of NEMATYC, a conference on Quantitative Literacy, our June Section meeting at Williams, the Short Course at Plymouth State, and the 2002 Mathfest at Burlington. I hope you will be able to find many things you want to go to. Also notice that the call for participation at the June meeting is being handled differently this year. Frank Morgan has sponsored many student presentations at MAA meetings and I hope you will be able to bring a student to the meeting. If not, consider giving a contributed paper yourself. Take a look at the long list of speakers who gave student papers, contributed papers, or new faculty talks at the Bridgewater meeting. (See below this message.) Let's see if we can get even more at Williams.

Finally, we are experimenting with electronic delivery of the newsletter. Over 200 people will not receive this newsletter through the US mail but will access it electronically instead. If we have missed any of you who would prefer not to get a hard copy, please e-mail me at fpford@providence.edu. I will add you to the electronic list.

Student Papers Presented at the Fall 2001 MAA/NES Section Meeting:

Arrow's Theorem and the Plurality Vote.

Catherine Makofske, Massachusetts College of Liberal Arts
Ranking College Football Teams: Fallout of the Borda Voting Method.

Mike Mazzantini, Massachusetts College of Liberal Arts
Demographic Shifts: A Statistical View of China's One Child Policy.

Eireann Kiley, Massachusetts College of Liberal Arts
Shattered Sets in Paley Digraphs.

Hester Graves, Wellesley College
An Application of Vectors to Pixel Graphics.

Ralph Fellows, Bridgewater State College
The Game of Life.

Craig Sheil, Keene State College
Abstraction of Images in the Mind and in Mathematics.

Marylea Ryan and Gayle Gossett-Otwell, Smith College
Pollack's Conjecture.

Brian Bayerle, Providence College
Collatz Numbers.

Patrick Boland, Providence College
Evens, Primes, and the Fundamental Theorem of Arithmetic.

Ryan Purcell, Western New England College

Contributed Papers Presented at the Fall 2001 NES/MAA Section Meeting

A Long Cycle on the Middle Graph of the Hypercube.

Mahmoud El-Hashash, Bridgewater State College
The Category of Long Exact Sequences and the Homotopy Exact Sequence of Modules.

C. Joanna Su, Providence College
Low-dimensional Modeling in Annular Convection.

Dan Rusu, Massachusetts College of Liberal Arts
A Few Sports Related Applications of Mathematics and Statistics
(or: How I spent my four years in the Seaway Section...) .

Rick Cleary, Bentley College
Electoral College Reform: A New Paradigm for Electoral Arithmetic.

Jim Wright, Green Mountain College
Math Online: Moving Mathematics into the Lab.

Chris Bernhardt, Laura McSweeney, Steve Sawin and Joan Weiss,
Fairfield University
Maple and The Wireless Laptop In Calculus III at Framingham State College.
Sarah L. Mabrouk, Framingham State College

New Faculty talks Presented at the Fall 2001 NES/MAA Section Meeting

Can We Three-Edge Color Origami Tori?

Sarah-Marie Belcastro, Bowdoin College
Representing Graphs as Matrices - Pictures by Numbers.

Jason Moliterno, Sacred Heart University
Using the Internet To Enhance the Teaching and Learning of Intermediate Algebra.

Emmitt Dennis, Southern Connecticut State University
An Algorithm for Finding Rational Interpolating Functions with Control Constraints.

Rebecca Sparks, Rhode Island College
Symmetry and the Model Independent Approach.

Dan Rusu, Massachusetts College of Liberal Arts
Curvature in Noncompact Manifolds.

Stanley S. Chang, Wellesley College
Isospectrality Conditions for Regular Graphs.
Gregory Quenell, Mt. Holyoke College

Laura Kelleher is the 2002 Distinguished Teacher Winner

Laura Kelleher of Massachusetts Maritime Academy is the winner of this year's distinguished teacher award for the Northeastern Section of the MAA. The editor asked Ockle Johnson, Chair of the Section and chair of the selection committee to write a few words about her. He also asked her nominator and colleague Frank Battles about her. This is what Ockle said:

When the Distinguished Teaching Award Committee reviewed Laura Kelleher's file, we first noted the degree to which her teaching excellence had a profound effect on her institution, Massachusetts Maritime Academy. Students spoke of how Laura cared about them and their success and how success in her classes instilled confidence and had long-lasting effects. Colleagues praised her dedication to students and her effectiveness in getting students to learn. Administrators held her up as a model of excellence for the school. The committee then noted her significant contributions beyond her campus. We were well aware of how her dedicated commitment to the Section and Section activities has contributed to our growth as teachers. But most impressive was her involvement in a number of programs for K-8 teachers. These teachers described how their experience with Laura was empowering and changed the way they taught forever. For these reasons and more, Laura Kelleher is a most deserving recipient of the Northeastern Section's Distinguished Teaching Award.

This is what Frank Battles had to say:

Dr. Laura Kelleher began her college level teaching career here at Massachusetts Maritime Academy in the fall of 1979. Since coming here, she has taught nearly all of our required mathematics courses: College Algebra and Trigonometry, Calculus I, Calculus II, Differential Equations, and Applied Environmental Mathematics as well as several elective courses. She does this with an enthusiasm which kindles in her students a sense of interest in the subject mathematics and practical applications of the material. This is often considered a challenge since Massachusetts Maritime Academy does not have a major in mathematics and student motivation tends toward courses in the major area. It is to her credit that her students come away with a sense of the importance that mathematics plays in their choice of a career. That she is considered one of the Academy's most effective teachers is made evident by the fact that in 1992 she received the Academy's first Award for Teaching Excellence and in 1996 she received from the State of Massachusetts The Commonwealth Citation for Outstanding Service. Dr. Kelleher currently serves as Department Chairperson for the Science and Mathematics Department at the Academy.

During several summers since 1992 she taught in the Young Scholars Program at Rutgers University, exploring applications of graph theory with extraordinarily bright high school students. She was well received in each of these programs, often asked to teach an additional course by her continuing education students, and invited back each year of the grant for the program at Rutgers.

Since 1992 she has been actively involved in the division of the Leadership Program in Discrete Mathematics which was developed at Rutgers University for middle school teachers. This program has been expanded to include K-8 teachers and is now offered at several sites in several states. Through these programs, Dr. Kelleher has

introduced many K-8 teachers to new mathematical concepts and teaching techniques. She was the teacher of choice for the Northern Rhode Island Collaborative's institute of the Leadership Program in Discrete Mathematics for 7th and 8th grade teachers as well as for the Partners in Discrete Mathematics Program held at Wheaton College beginning in July 2001.

Dr. Kelleher has been quite active on both the Section and National level in the Mathematical Association of America. For the Northeastern Section, she has served on program committees, as Local Arrangements Coordinator, Secretary-Treasurer (two terms), Vice-Chairperson, Chairperson and Past-Chairperson. In addition, she has served as Chair of the Nominations Committee and the Teaching Award Selection Committee. She originally proposed that the Section introduce an annual minicourse similar to those presented at the National meetings and assisted in the development of the Section's successful program of Regional Dinner Meetings which continue to be held throughout New England. In recognition of these contributions she was awarded the MAA Certificate of Meritorious Service in 1997. On the National level she served on the Committee on Sections from 1990-1999, on the Program Committee for Mathfest 2002 and continues to serve on the Mathfest Site Selection Committee.

Dennis Luciano Receives the NES Distinguished Service Award

Dennis Luciano is the fourth recipient of the Northeastern Section of the MAA's Distinguished Service Award following in the path of Frank Battles, Laura Kelleher, and Jim Tattersall. Dennis has been Chair of the Section and Governor of the Section twice. He organized last year's short course and has served on numerous committees of the Section. During this time, he has been Chair of the Mathematics Department at Western New England College and has been President of the Faculty Senate at WNEC. As Chair of his department, he is a frequent participant in the Employment Register at the Annual Joint Mathematics Meetings and has built up an excellent department at WNEC.

Phillip Mahler Elected President of AMATYC

Philip Mahler, Middlesex Community College, former Northeast Section Newsletter editor (1984-1987) and two-year college representative, is the current president of the American Mathematical Association of Two Year Colleges (AMATYC) (Nov. 2001 - Nov. 2003). His main goal is to maintain and strengthen AMATYC during his two year term. However one large project which is starting up on his watch is the updating of the AMATYC "Crossroads in Mathematics" document which came out in 1995. It is a "reform" standards document for mathematics preceding calculus, including paths not leading to the calculus, and was in some sense a follow-up to the 1989 NCTM Standards documents. He has had ongoing contacts with MAA President Ann Watkins, and Tom Banchoff before Ann, and MAA Executive Director Tina Straley, and of course, he plans to maintain a cordial and cooperative relationship between the MAA and AMATYC. As he put it, "as a loyal MAA member since 1977 and Northeastern Section member since 1983 this is as important to me personally."

Clayton Dodge Receives the C.C. MacDuffee Award

After 20 years of service as Problems Editor of the Pi Mu Epsilon Journal, Clayton Dodge is stepping done. In recognition of his outstanding contributions, he was awarded the C. C. MacDuffee Award for Distinguished Service on August 4, 2001 at the Annual Meeting of Pi Mu Epsilon held in Madison, Wisconsin. Clayton taught at UMaine-Orono for many years and was the second recipient of this Section's Howard Eves Award which was appropriate since Howard Eves was his mentor at UMaine. In his twenty years, he has handled over 500 problems starting with problem #462 and ending with problem #1006. For more information on this award and on Clayton Dodge's active retirement life, see the article in the The A 9 + Journal, Volume 11, #5 (Fall 2001), pp.271-273.

Quantitative Literacy Conference

(I received this notice from Judith Moran via Donna Beers. You may remember that Judith was a speaker at our Fall meeting in 2000. I thought the membership might be interested in this.—Editor)

The sixth annual meeting of NECQL (North East Consortium for Quantitative Literacy) will take place at Trinity College on Saturday, April 20.

PR and QL: How Do We Get the Message Out?

10:00-10:30 Continental breakfast, Smith House

10:30-11:15 Public Relations for Quantitative Skills Centers: how do we make quantitative skills centers more effective and user-friendly?

11:30-12:15 Public Relations for Quantitative Literacy in Academe – updates on several national initiatives, collaborations and grant possibilities and professional opportunities.

12:30-1:30 Lunch, Smith House

1:30-2:30 Public Relations for Quantitative Literacy Among Colleagues on Campus –Caren Diefenderfer will talk about her experiences creating a QL program at Hollins

2:45-3:30 Funding opportunities for NECQL and member schools through the NNN

3:30-4:00 Coffee and wrap-up: formation of committee to plan and host next spring's meeting and coordinate interaction with the NNN.

The major focus of our meeting is usually information sharing. This year there is a lot to share. As many of you have probably noticed, there have been several articles in FOCUS in the last few months addressing QL. Two particularly informative articles are Bernie Madison's "Quantitative Literacy: Everybody's Orphan" in the Sept/Oct 2001 issue and Lynn Steen's "Quantitative Literacy: Why Numeracy Matters for Schools and Colleges" in the current Jan/Feb 2002 issue. Lynn spoke to our group two years ago when we met at Amherst College. His article reports on a national forum on QL held in DC last December at the National Academy of Sciences, and the formation of a National Numeracy Network to "support schools and colleges that are exploring ways to infuse QL into their curricula." In particular, Trinity is one of the centers belonging to the NNN, and the NNN is supporting our meeting by bringing Caren Diefenderfer from Hollins University in Virginia to talk about the Quantitative Literacy program there.

The NNN wants to know how it can support and encourage us next year. This includes financial as well as moral support! Please come with ideas!

Since the Dean of Faculty's office is providing refreshments and lunch, please RSVP to the Math Center Administrative Assistant Adam.Wittenberg@mail.trincoll.edu so we'll know how many stomachs are coming.

NES/MAA Short Course on Integrating the Web Into Math Instruction

Cathy M. Frey, Gerard LaVarnway, and Robert Poodiack, from Norwich University will present at the NES/MAA annual short course at Plymouth State College in New Hampshire June 23-27th. The topic is "Integrating the Web into Mathematics Instruction." Cost is \$225 for single occupancy, \$235 for double occupancy. These prices include a room in the residence hall and three full meals on Tuesday and Wednesday and breakfast and lunch on Wednesday and Thursday. Short course and meals only cost \$150. Send name, address, institution, phone, and e-mail with check made out to Plymouth State College by June 1st to

Paul Estes
Department of Mathematics, MSC 29
Plymouth, NH 03264

For information, contact Paul Estes at (603)535-2486 or e-mail him at ple@mail-plymouth.edu.

Course schedule is:

Sunday 6/23/02

5-8 pm Registration

Monday 6/24/02

9:00 am Welcome and introductions

9:15-10:30 Overview of Short Course

10:45-12:00 Using Word2000© and MathType5 © to create Web pages.

2:00-4:30 Using FrontPage ©2002 and MathType5 © to create Web pages

Tuesday 6/25/02

Morning Sess Introduction to Mathematica ©

1:30 pm Depart for outing at Cannon Mountain

Wednesday 6/25/02

Morning Sess Creating animated Web pages

Afternoon Sess Introduction to LiveMath ©

Thursday 6/27/02

On-line assessments

Individual project time

Depart by 3 pm

Abstract:

The World Wide Web has significantly changed the landscape of graduate and undergraduate education. Student access to the Internet makes distance-learning modules a preferred method of instruction for some students and faculty. Mathematics is one discipline that has lagged behind this trend in education. The development of meaningful mathematical modules is critical to distributing mathematics education over the Web.

This short course will demonstrate websites that have been successfully delivered a variety of mathematical topics from typical undergraduate PreCalculus and Calculus courses. The course will introduce the software and techniques used to develop the demonstrated sites, such as Mathematica©, MathType©, WebEQ©, FrontPage© and JavaScript©. Several sessions will provide participants an opportunity to develop proficiency in using these tools. By the end of the four-day course participants will be able to develop Web pages for presenting mathematics over the World Wide Web. If time permits, participants will be introduced to online assessment.

To preview a site created with these methods look at
<http://www2norwich/frey/TaylorPolynomials/> .

The course is designed to accommodate participants of all skill levels. However, only familiarity with use of computers is necessary for participation. High School mathematics educators through post-graduate with an interest in mathematics education on the Web should find this course useful.

MAA Northeast Regional Spring Dinner Meetings

Bentley College, Waltham, MA

Tuesday, March 26, 6:00 p.m.

LaCava 300AB

Speaker: Dr. Richard Cleary, Bentley College

Topic: Models For the Qualification Process

Organizer: Lucy Kimball

E-mail: lkimball@bentley.edu

Cost: \$15.00 Please send check to

Lucy Kimball

Department of Mathematical Sciences

Bentley College

175 Forest St.

Waltham, Ma. 02452-4705

Please register by March 18, indicate choice of chicken or fish.

Abstract: Do you believe that you are safer riding with someone who passed their driver's test on the first try than on the seventh try? Our society puts a great deal of faith in a variety of qualifying mechanisms (examinations or elections) to establish competence or acknowledge excellence. Examinations include the driver's license example and attorneys seeking certification by passing the bar exam. Election examples include selection to many honorary societies and baseball's Hall of Fame. We consider the mathematical, statistical and societal implications of a few basic models for these processes.

Rhode Island College

Monday, April 8, 6 p.m.

Faculty Center

Speaker: Dr. Frederick Greenleaf, the Courant Institute, New York University

Topic: Promoting Quantitative Literacy

Organizer: Barry Schiller Phone (401) 456- 8654, E-mail Bschiller@ric.edu.

Cost:\$15.00 Please send check to

Barry Schiller

Mathematics/Computer Science Department

Rhode Island College

Providence, RI 02908

Dinner: Lemon Chicken

Ninth Leonard C. Sulski Memorial Lecture

College of the Holy Cross, Worcester, MA

Thursday, April 18, 2002

Speaker: Dennis DeTurck, University of Pennsylvania

Title: Coiling and writhing in geometry, biology and physics

organizer: Thomas Cecil email:cecil@mathcs.holycross.edu phone: (508) 793-2719

5:30 pm Cash bar, Hogan Campus Center Suite B

6:15 pm Dinner, Hogan Campus Center Suite B

8:00 pm Presentation in Hogan Room 519

Choice of entrees: Broiled Boston Scrod or Chicken Marsala

(Please indicate your choice when you send your check)

Price: \$15.00. Make checks payable to: Holy Cross College

Send registration to:

Thomas Cecil
Department of Mathematics and Computer Science
College of the Holy Cross
Worcester, MA 01610-2395

Deadline: April 8, 2002

St. Paul's School New Hampshire

Wednesday, May 8

Upper dining Room, St. Paul's School, Concord, NH

**Speaker: Dr. Leonard Gillman of the University of
Texas at Austin, and Past President of the Mathematical Association of
America.**

Topic: Comprehensive Solutions to Coin Weighing Problems

organizer: Larry Braden e-mail: lbraden@sps.edu

6:00 - 6:30 PM Social 6:30 - 7:30 PM Dinner 7:30 - 8:30 PM Address

This talk presents a counterintuitive solution to the famous 12-coin weighing problem.

The method of deriving it is also unexpected. Menu: Roast Prime Ribs of Beef - au jus or (Vegetarian)

Composite Pasta Alfredo, Groups of Cubed, Roasted Potatoes, 3 Bean Salad on a Field of Lettuce, 7 Grain Bread -
Butter Squares, Pineapple Rings, Pie, Coffee, Tea

Price: \$16.25. Be sure to indicate whether PRIME or COMPOSITE.

Checks should be made payable to ST. PAUL'S SCHOOL

and mailed by May 1, 2002 to

Lawrence S. Braden
St. Paul's School
Concord, NH 03301

**MAA JOINT MEETING OF THE NORTHEASTERN AND SEAWAY SECTIONS
WILLIAMS COLLEGE
WILLIAMSTOWN MA
JUNE 21-22, 2002**

**Program Committee:
Cheri Boyd, Nazareth College,
First Vice Chair of the Seaway Section
Victor Hill, Williams College
Frank Morgan, Williams College, Chair
Tommy Ratliff, Wheaton College
Janine Wittwer, Williams College**

Friday, June 21, 2002

2:00-2:45 pm Executive Committee Meeting

3:00-3:45 pm Tea (and Project NExT)

4:00-4:45 pm

**Thomas C. Hales, Mellon Professor of Mathematics,
University of Pittsburgh**

"Computer and Proof in the Context of Discrete Geometry"

5:00-5:20 pm

5:30-5:50 pm

6:00-6:20 pm

Future Colleagues Talks in parallel

(This year, undergraduates as well as graduate students)

6:30 pm Dinner

8:00 pm Battles Lecture

**Thomas Garrity, Professor of Mathematics,
Williams College**

"On Writing Numbers: The Hermite Problem"

Saturday, June 22, 2002

9:00-9:30 am

**Sean McLaughlin, graduate student
in Computer Science, New York University**

"Verification of Free Choice"

9:45-10:15 am

10:30-11:00 am

Contributed papers in parallel

11:30-11:55 am Business meeting

12:00-1:00 pm Lunch

1:15-2:15 pm Hike or visit to Clark Art Museum

Abstracts and Biographies

Thomas C. Hales, Battles Lecturer

"Computer and Proof in the Context of Discrete Geometry"

Abstract: Gian-Carlo Rota once wrote that mathematicians are ``on the lookout for an argument that will make all computer programs obsolete." At the other extreme is the elusive search for the computer program that will make all mathematicians obsolete. This lecture will discuss the interplay of computers and mathematical proof in the context of some large-scale computer-assisted proofs, such as the Kepler Conjecture.

Hales is Mellon Professor of Mathematics at the University of Pittsburgh. After attending Stanford and Princeton, he took posts at MSRI, Harvard, IAS, Chicago, CNRS, and Michigan. He recently proved the 400-year-old Kepler Conjecture on sphere packing, as well as the 2000-year-old Hexagonal Honeycomb Conjecture on efficient partitions of the plane. The proof of the Kepler Conjecture used extensive and intricate computer calculations, and he is now looking at ways to use computers to prove other difficult theorems.

Thomas Garrity, Dinner Speaker

"On Writing Numbers: The Hermite Problem"

Abstract: What is the best way of writing numbers? Rationals are easily identified by their periodic decimal expansions. Quadratic irrationals are easily identified by periodic continued fraction expansions. But what about cubics, etc? This is the Hermite Problem.

Garrity is Professor of Mathematics and recent chair at Williams College. He was an undergraduate at the University of Texas at Austin, a graduate student at Brown, and an Evans Instructor at Rice before coming to Williams in 1989. He has spent leaves at Washington and Michigan. He works in algebraic and differential geometry and number theory, and has a new book on "All the Mathematics You Missed [But Need to Know for Graduate School]."

Sean McLaughlin

"Verification of Free Choice"

Abstract: Verification is the process of mathematically proving that a computer program is correct. We will look at classical deterministic and probabilistic "free choice"

algorithms for solving Dijkstra's notorious "Dining Philosophers problem" and present new results on how implementations can be proven correct.

McLaughlin is a graduate student in Computer Science at New York University. While an undergraduate at The University of Michigan, he won the national Morgan Prize for undergraduate research for his work under Hales in proving the Dodecahedral Conjecture on local sphere packing.

Directions to Williams College

From north, west, or south, take Route 7S, 2E, or 7N into Williamstown, and continue on 2E from the circle in front of the Williams Inn. After one more block, turn right onto Stetson Court. Two-thirds of the way down the street, there is a parking lot entrance on your left. If you park to the left, you will be at the back of Brooks House "Conference Center" on Route 2, where you can register Friday from 1-6 pm (or at Williams Security after 6 pm).

From the east, take the MassPike to the Lee exit, 20W to 7N and follow directions above. Or take the more scenic 2W into Williamtown, past most of the College, and turn left onto Stetson Court as above.

Conference Fees

Reservations and payments due by April 21 to
Marissa Barschdorff, MAA Conference
Department of Mathematics and Statistics
Williams College
Williamstown, MA 01267

Cost per person: \$100

(For dorm and registration, which includes dinner, breakfast, coffee, lunch, cookies).

Dorms have all necessities, shared baths, no air conditioning, no pets.

(Working phone jacks if you bring a phone.)

Without dorm: \$85

Student speakers: \$25, or if willing to sleep on a dormitory floor: free

Undergraduate speakers will receive a complimentary MAA membership; current members will receive a complimentary journal subscription.

Accommodations

A block of rooms is reserved at Williams Inn for an additional \$95 single, \$125 double, plus tax; (413) 458-9371.

Call for Participation

Graduate or undergraduate students who would like to present 20-minute talks in the "Future Colleagues Talks" parallel session and all who would like to present 20-minute talks in the Contributed Paper session should submit the following information by April 21 by email to Victor.E.Hill@williams.edu:

1. Session ("Future Colleagues" or Contributed Papers)
2. Name, department, institution (or other address if you prefer), as you'd like to be listed.

3. Title
4. Short abstract
5. Needs (blackboard, overhead transparency projector, etc)
6. For undergraduates, the name of a faculty sponsor who will advise your preparation of an expository talk and hear you rehearse it.

Registration Form

**Joint Meeting of the Northeastern Section and Seaway Section- MAA
June 21-22, 2002 Williams College**

Mail this form to :

**Marissa Barschdorff, MAA Conference
Department of Mathematics and Statistics
Williams College
Williamstown, MA 01267**

Check should be made to: Williams College

REGISTRATION (please type or print):

Name: _____

Institution: _____

Address: _____

Telephone () _____

E-mail _____

Registration Fee:

Conference and Dorm(\$100) \$

Conference Only(\$85) \$

Student Speakers(\$25) \$

Meals are included

Plans for Section Next Program in the NES/MAA

Lisa Hunphreys of Rhode Island College is organizing a preliminary Section Next meeting of the NES/MAA in conjunction with the fall conference at Framingham State College. All new and recent colleagues are invited to attend. The program is yet to be finalized but will most likely begin late morning on Friday. It will include 1 or 2 presenters, lunch and discussion of future plans. For further information or suggestions, please contact her at LHumphreys@ric.edu.