THE SEAWAY CURRENT

Newsletter of the Seaway Section of the Mathematical Association of America

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Fall, 2012

Our Fall meeting, October 19-20, will be hosted by Elmira College.

Elmira College is a private, liberal arts college with about 1200 students. It was founded in 1855 in order to provide women with the same rigorous education provided for men at Harvard, Dartmouth and Cornell. It became coeducational in 1969. Students live on the picturesque campus for their entire course of study.

The college is in the Finger Lakes region of New York. As an interesting sideline, Mark Twain lived and wrote in Elmira, and his wife, Olivia Langdon Clemens, was an alumna of Elmira College (class of 1864).

Thank you Elmira College for hosting our meeting!

Meeting Highlights

The banquet speaker is Jerome Epstein, Brooklyn Polytechnic University.

The invited speakers for Saturday morning are national MAA committee representative Doug Ensley of Shippensburg University; John Ringland, University of Buffalo, who was last year's recipient of the Seaway Section Clarence F. Stephens Distinguished Teaching Award; finally Jamar Pickreign of SUNY Fredonia who will present the Randolph lecture.

There will be a workshop titled "Introduction to WeBWork", led by Patrick Rault and Aaron Heap of SUNY Geneseo. Seaway NExT will host a discussion titled "Building Community Among Students". Undergraduate students can compete for fame and fortune in "Math Jeopardy" after the banquet on Friday night. All this and also, as always, there will be an interesting collection of contributed talks.

More details may be found in what follows, or on the meeting website, http://www.elmira.edu/academics/conferences/maa

The Speakers:

Friday Evening – The Banquetspeaker



Jerome Epstein, Poyltechnic University, Brooklyn, NY, (banquet speaker) "Hands-on Laboratory Mathematics -- A Bridge to Understanding"

Dr. Jerome Epstein has had an active career in mathematics and science education since earning his Ph.D. in Mathematical Physics at New York University. He has been on the faculty at Polytecnic University since 1998, with research interests in diagnostic testing, teacher education, and mathematical physics. He developed The Calculus Concept Inventory, an assessment of conceptual understanding of calculus, modeled after the Force Concept Inventory used in physics education. He is an accomplished musician, a former music director of the New York Revels, and the author of several songbooks of American folk songs and music for the High Holy Days.



John Ringland, (morning speaker)

Associate Professor of Mathematics, Director of UB CSUMS Program, University at Buffalo

Talk Title: "Suppressing by sustaining - refuges in pest control"

Abstract: The presence of refuges in a habitat - small patches that are anomalously benign or protective - can greatly influence the evolution of populations living there, sometimes in surprising ways. An economically important example is that leaving patches of agricultural cropland untreated with pesticide can allow farmers to control a pest population that carries a gene for immunity - without immunity ever rising to significant levels in the population. I'll illustrate and explain with some simple models of populations with diploid genetics.

Bio: John Ringland grew up in Belfast, N. Ireland, and obtained his Ph.D. in Physics from the University of Texas at Austin. He is an Associate Professor of Mathematics at the University at Buffalo, with research interests in dynamical systems and computational mathematics. He served the UB Math Department for 6 years as Director of Undergraduate Studies, and for the past 4 years has been the director of an undergraduate research program funded by the CSUMS program of the National Science Foundation, which has provided intense year-long research opportunities for over 50 math majors. He is the recipient of the MAA Seaway Section 2012 Clarence Stephens Award for distinguished university teaching.



Doug Ensley, (morning speaker)Professor of Mathematics, Shippensburg University

Title: "Invariants under Group Actions to Amaze Your Friends!".

Abstract: By understanding invariant properties of a group action (a.k.a., shuffling) on a deck of cards, a magician can find order where the spectator believes he or she has created disorder, often resulting in a surprising, perhaps even magical effect. This presentation will highlight some specific card tricks that illustrate the mathematical ideas of permutations and invariance.

Bio: Doug Ensley is Professor and Chair of Mathematics at Shippensburg University, where he has been on the faculty since 1993. His primary academic interests are in discrete mathematical topics and the use of technology in teaching mathematics. Recently, he co-founded with Barbara Kaskosz of the University of Rhode Island the website, www.flashandmath.com, which received the 2009 ICTCM Award for Excellence and Innovation with the Use of Technology in Collegiate Mathematics and which formed the basis for the book, "Flash and Math Applets: Learn by Example." Doug is currently PI on the NSF grant, "Mobile Math Apps," which will construct and assess a suite of precalculus apps for smartphones.



Jamar Pickreign

Associate Dean of Education, Associate Professor of Mathematics Education, Co-Director of Project PRIME

Title: We Teach Math...to People

Abstract: Mathematics Education deals with how people learn mathematics. This talk presents some of the challenges we face when teaching our subject matter and some ideas that can help us help students to learn.

Bio: Dr. Jamar Pickreign is a former grades 7 - 12 mathematics teacher in Central New York and was a P-8 mathematics education specialist as a member of the faculty of Rhode Island College. A SUNY Fredonia College of Education faculty member since 2001, he is currently Associate Dean of the College of Education. He is also co-Director of Project PRIME' (Professional Resources In Mathematics Education), a mathematics education professional development endeavor he started with colleagues Dr. Keary Howard and Dr. Bob Rogers of the SUNY Fredonia Mathematical Sciences Department. Dr. Pickreign is also an associate editor of the New York State Mathematics Teachers' Journal.

The full meeting program is not available at time of going to press:

Please refer to the meeting web site for updates on the program (http://www.elmira.edu/academics/conferences/maa/program)

REPORTS

1. Seaway Section Governor's Report - Fall 2012 - Gary Towsley.

I attended my first Board of Governor's meeting on August 1, 2012 at MATHFEST at Madison, Wisconsin. The meeting agenda was 197 pages long, but the meeting lasted less than eleven hours since the bulk of the agenda consisted of attachments for use at the meeting.

At a Board of Governor's Meeting, much of the work is routine – accepting recommendations from committees for awards, membership of committees, or chairmanships. One of these actions was to accept the revision to our by-laws(adding an at-large member to the executive committee). This action was unanimous (actually without any discussion at all). Elections were held to replace outgoing officers and members of various committees. The bulk of the active work at this Board of Governor's meeting involved two issues – "Double-Blind Refereeing" and the "Fiscal Health of the MAA".

Double-Blind Refereeing

Doubly-masked (or double-blind) review is a practice under which neither referees nor authors are told one another's identities. Since a referee can sometimes guess the identity of an author and authors sometimes know who would logically be chosen to review their papers, it seems most practical to focus not on who knows whose identity, but on what information is conveyed to referees by editors when they request a review.

Partly as a result of the AWIS study of the proportion of prizes awarded to women by the MAA, the Council on Prizes and Awards and the Council on the Profession each passed a motion that all review for MAA journals be doubly-masked. (The CMJ already uses doubly-masked review, while the Monthly and the Magazine do not.)

At the Joint Math Meetings in January 2012, a committee was formed under the Committee on Journals to study the issue and to make recommendations. The committee report was delivered on June 14, 2012 and made the following recommendation:

"The committee finds merit in many (though not all) of the arguments on both sides of the issue. While we are fully committed to the eradication of improper bias, if bias were not operating in this context, then the move to double-blind refereeing would be a burden and not an asset. Thus we are strongly influenced by the data we examined. The clearest picture arises from single-author papers for men and women, and what is very close to equal acceptance rates for all such submissions. We have

some speculations as to why double-author papers have varying acceptance rates, but given the result on single-author papers, we do not believe that this is an instance of bias. And while the acceptance rates for all-female multiple-author papers is noticeably low, there are very few papers in this category, and the acceptance of even one or two more papers would change

the statistics dramatically. No member of the committee had a strong opinion either in favor of or opposed to double-blind refereeing. On balance, our collective opinion is that absent a clear reason to adopt this policy, we find that the Monthly is well served by its current practice and recommend that it not adopt doubleblind refereeing. "

Following a very long discussion of the issue, the Board of Governor's passed a resolution that roughly said (the actual language of the resolution is in the minutes of the meeting which are not out yet) "the MAA will move towards double-blind refereeing in all its journals. Editors and referees now serving will not be required to adhere to this policy."

The Fiscal Health of the MAA

For the past five years the MAA has had an operating deficit in the range of \$200K-\$300K per year. The entire operating budget is approximately \$9.5 million each year. Should these deficits continue, it would materially weaken the MAA. While the association has assets of around \$13 million, it has only about \$700,000 that is liquid and unencumbered. Michael Pearson, Executive Director of MAA made several general proposals for addressing this problem. The Board of Governors approved the general plan and awaits proposals for specific actions.

The fiscal plan calls for investment in certain initiatives to increase the revenue and effectiveness of the MAA. Specifically these are:

- 1. Increase both production and sales of MAA books, in both print and electronic versions, including an increased emphasis on textbooks.
- 2. Broaden participation in MAA's AMC mathematical contests.
- 3. Begin a development effort centered on MAA's Second Century, beginning in 2015 with its centennial.
- 4. Increase participation in both national and sectional meetings.
- 5. Improve the MAA website.

Item number 2 is particularly important since the AMC contest is one of the largest sources of revenue for the association. Presently about 375,000 students participate per year out of an eligible population of 18,000,000. Even a modest 10-15% increase in participation would help the financial situation considerably.

Item number 4 needs some explanation. It is the policy of both the MAA and AMS to run the national meetings at cost, that is, not to expect a profit. Many of the scientific societies (The American Chemical Society for example) use their national meetings as serious sources of revenue. These societies usually have much stronger connections to industry and receive much stronger support from non-academic sources. Increased attendance at meetings would shift these meetings from small losses of revenue to small gains in revenue and would also increase the general level of membership in the association.

Specific proposals on these items are expected to be presented at the Board of Governors meeting in January 2013 in San Diego, California.

Respectfully submitted by Gary Towsley, Governor of the Seaway Section, September, 2012.

2. Treasurer's Report - Fall 2012 - Gary Towsley

1. Balance as of 3/29/2012	\$12,414.32
2. Spring Meeting at Hamilton College	
a) Meeting Expenses	\$7,729.16
b) Meeting Receipts	\$7,020.39

c) Deficit	(\$708.77)
3. Proceeds of Booksale	\$6.52
4. MAA Subvention	\$1,377.00
5. Balance as of 9/1/2012	\$13,089.07

3. Minutes of the Business Meeting, April 14, 2012 - Gary Raduns

Hamilton College, April 14, 2012

The meeting was called to order at 10:50 am with approximately 16 in attendance. Cheri Boyd, Seaway Section Governor, gave a report highlighting a few items from her written report:

- •Forthcoming changes in the utilization of SIGMAA dues.
- •A joint statement with NCTM regarding Calculus in High School.
- •Implicit bias
- •Nomination of Bob Rogers for the Seaway Section Meritorious Service Award.

Charlie Ragozzine, First Vice Chair/Program Chair reported on speakers for the fall meeting to be held at Elmira College. Doug Ensley has been confirmed and we are awaiting response from John Ringland, the recipient of the Clarence Stephens Distinguished Teaching Award for 2012.

Ryan Gantner, Student Program Chair, reported on the high level of student enthusiasm and 27 student presenters at this meeting.

The Distinguished Teaching Award Committee announced the recipient of the Clarence Stephens Distinguished Teaching Award—Dr. John Ringland of SUNY at Buffalo.

Hossein Shahmohamad, Chair of the Seaway Section, gave a brief report highlighting:

- •The Association's request for financial support from the Sections for Project NExT.
 •Vacancies on the Executive Committee for 2nd Vice Chair (representing Community Colleges) and the 1st Vice Chair (Program Chair).
- •The interim appointment of John Maceli to the new at-large member of the Executive Committee.
- •Reporting the election of Gary Towsley as Governor of the Seaway Section.
- •Thanks to Cheri Boyd for her three years of service as Seaway Section Governor.
- •Thanks to Jeff Johannes for 5 years of service as chair of the Seaway NExT/PFF program. Matt Koetz will be assuming leadership of that program.
- •Request for volunteers for the various committees of the Seaway Section.

The Nominating Committee presented Charlie Ragozzine as nominee for Chair-Elect. Receiving no nominations from the floor, Charlie Ragozzine was elected on a show of hands. Respectfully submitted,

Gary L. Raduns, Jr. Secretary of the Seaway Section MAA

4. Minutes of the Executive Committee Meeting, April 13, 2012 - Gary Raduns

Hamilton College

Called to order at 3:29

Present: Cheri Boyd, Hossein Shahmohamad, Charlie Ragozine, John Maceli, Gary Raduns, Bob Rogers. Minutes of the Fall 2011 Executive Committee Meeting were reviewed and approved apart from typographical errors.

Governor's Report. The Governor's printed report was distributed and reviewed. Secretary's Report:

- 1. The Secretary reported, for the record, the election of Gary Towsley to serve as Governor of the Seaway Section for the period July 1, 2012 to June 30, 2015.
- 2.The By-Laws amendment to include an at-large member on the Executive Committee has been forwarded to the Committee on Sections and should be acted on by the Board of Governors in August. Although we are permitted to conduct an election the Nominating Committee is not prepared with a nominee. On voice vote of the Executive Council, John Maceli was elected as interim at-large member. He will serve until Spring 2014. The Executive Council establishes that a call for nominations for the at-large member will be given at the fall meeting in odd years with elections conducted in spring of even years.
- 3.The Executive Committee directs that the Seaway Section provide up to \$500 per year to support the attendance of one officer at MathFest. If the officer has institutional support, this fund may be used to support the attendance of a member of the Section at MathFest.
- 4. Since Gary Raduns was planning to attend MathFest, he will be the designated officer.

Treasurer's Report: The treasurer provided a written statement of acounts (attached) indicating a balance of \$11,555.37 on 9/29/2011 and a balance of \$12414.32 as of 3/29/2012.

First Vice Chair's Report. Charlie Ragozine, first vice-chair, reports that Doug Ensley has been secured as a keynote speaker for the Fall 2012 meeting to be held at Elmira College, October 19-20, 2012. John Ringland, the Section's Distinguished Teaching Award recipient, will also be invited to speak at that meeting. We have not yet secured a venue for the Spring 2013 meeting and SUNY Potsdam has recently agreed to host the Fall 2013 meeting.

Chair's Report. Hossein's report focused on our efforts to identify host institutions for future meetings. The Executive Committee formed an ad hoc committee consisting of Bob Rogers, John Maceli, and Cheri Boyd to assist in the effort to find hosts.

New Business:

- 1.Recognition of the election of Gary Towsley as Governor of the Seaway Section. The Excecutive Committee also expresses its thanks to Cheri Boyd for her service as Governor over the past three years.
- 2.Recognition of the selection of John Ringland of SUNY at Buffalo as the Clarence Stephens Distinguished Teaching Award recipient.
- 3. Chair Hossein Shahmohamad reported receipt of a request from the Association for \$2500 from the Section to support Project NexT. The Executive Committee will not honor that request. Hossein will raise some questions with the Association and report to the Executive Committee with a recommendation for a much smaller contribution, if any.

- 4.A Meritorious Service Award Selection Committee comprised of Joe Straight, L.C. Kappe, and Cheri Boyd presented Bob Rogers for selection to recieve this award. The committee also presented two recommendations (a) that the Section webpage include information regarding the Meritorious Service Award and the Sections archives be searched for citations of previous awardees for inclusion on the web site, (b) that the Meritorious Service Award Nominations Committee should consist of the previous two Meritorious Service Awardees and the current Governor.
- 5. Given Gary Towsley's responsibility as both Treasurer and Governor, Margaret Morrow has agreed to take on editing the Seaway Current.
- 6.Hossein shared updates on filling vacancies in the committees of the Seaway Section. Notably, at the time of the Executive Committee meeting, there is no nominee for 1st Vice Chair, or 2nd Vice Chair. Charlie Ragozine has accepted nomination for chair-elect.

The Executive Committee Meeting Adjuorned at 5:25 pm and passed immediately to a brief Extended Executive Committee Meeting.

Respectfully submitted,

Gary L. Raduns, Jr, Secretary of the Seaway Section

5. Minutes of the Extended Executive Committee Meeting – April 13, 2012 – Gary Raduns

Hamilton College

The meeting came to order at 5:25 and received brief reports.

The Nominating Committee reports no nominees yet for 1^{st} Vice-Chair/Program Chair, or 2^{nd} Vice-Chair. Charlie Ragozzine will be nominated for chair-elect.

The Gehman Lecture Committee notes that Col. Steve Horton will be speaking at this meeting. They are awaiting the venue for Spring 2013 to begin the search for the Gehman lecturer for Spring 2013.

The Distinguished Teaching Award Committee reported the selection of John Ringland as this year's Clarence Stephens Distinguished Teaching Award recipient.

There is no report form the Educational Policies Committee, the Seaway Current Editor or the Public Information Officer.

Seaway NexT reports that 15 people participated in this Spring's sessions. Matt Koetz is taking over as chair of the Seaway NexT/PFF Program.

The Webmaster provided a written report indicating progress on the site, areas for which information is needed, and future directions (reconfiguring the electronic archives).

The Program Committee reports on the selection of Doug Ensley to speak at the Fall meeting. They plan to extend an invitation to John Ringland to speak at the Fall meeting also.

The Student Program Committee reports that Dave Brown did much of the work assembling the student program for this meeting. There are 27 talks by undergraduates scheduled in the Student Paper Session. The Student Program has discontinued the poster session.

The treasurer reports that there will be a book 'sale' at this meeting.

The Chair gave a quick overview of the discussions of the preceding Executive Committee meeting.

The meeting adjourned at 5:40. Respectfully submitted, Gary L Raduns, Jr. Seaway Section Secretary

Section notes:

1. Seeking instructors to try out materials;

Gerry Rising, Eileen Schoaff and Deborah Moore-Russo (SUNY Buffalo) have written ABOUT MATHEMATICS, a text designed for college and school humanities students. More information about their project is at www.buffalo.edu/~insrisg/AboutMathematics.html. They are seeking instructors interested in trying their unique approach to this audience and will provide both textual materials and support for such trials. Anyone interested should contact Rising at insrisg@buffalo.edu

2. Utica College

Brad Emmons has been selected as the new Chair of the Mathematics Department at Utica College.

The department is excited to announce a new addition to the Seaway Section, Assistant Professor of Mathematics, John Peter. John Peter did his undergraduate work at the University of Michigan - Dearborn, with a major in mathematics and a minor in applied statistics. He went on to Wayne State University in Detroit, MI where, under the supervision of Professor John R. Klein, he earned a Ph.D. in mathematics, specializing in homotopy theory and algebraic topology. His research focuses on using homotopy-theoretic methods to solve problems in embedding theory.

3. SUNY Fredonia

Jonathan Cox and Teodora Cox were granted tenure and promoted to associate professor. Keary Howard was promoted to full professor.

SUNY Fredonia May graduate Mark Kleehammer presented the talk, "Star Studded Mathematics," at MathFest. The talk was based on his research on the sum of the vertex angles in an arbitrary star, work done for his honors thesis. His work was supervised by Robert Rogers. Mark won one of the MAA's student awards for his presentation. He is now attending graduate school in mathematics at Queen's University in Kingston, Ontario, Canada.

4. Buffalo State College

Daniel Cunningham's new book "A Logical Introduction to Proof" has been published by Springer. Information about the book can be found at http://www.springer.com/mathematics/book/978-1-4614-3630-0

5. Roberts Wesleyan College

Gary Raduns is the chair of the new Department of Computer Science, Mathematics and Physics at Roberts Wesleyan College. As part of campus-wide academic restructuring, the Division of Natural Sciences and Mathematics became two departments: the

Department of Biological and Chemical Sciences and the Department of Computer Science, Mathematics, and Physics.

6. Canisius College

The Department of Mathematics and Statistics has moved into spacious quarters in the new Science Hall.

Two of our faculty members are on full-year sabbatical leaves. Byung-Jay (B.J.) Kahng has a Fulbright grant to conduct research at Katholieke Universiteit Leuven in Belgium. Anthony Weston is currently at the University of New South Wales in Sydney, Australia, and next semester will be a Visiting Research Professor in the Department of Decision Sciences at the University of South Africa in Pretoria.

Four of our students gave talks in January at the Nebraska Conference for Undergraduate Women in Mathematics at the University of Nebraska: Danielle Mallare (now a graduate student at the University of Buffalo), Mary Russell (now a graduate student at Ohio State), Regina Pollack, and Samantha Yeomans.

Future Meeting:

Spring 2013- April 19-20, 2013, at SUNY Fredonia

Some Important Links

Seaway Section Website: http://people.rit.edu/maacway/

Governance: http://people.rit.edu/maacway/governance.html

The Seaway Current

The Seaway Current is published twice per year by the Seaway Section of the Mathematical Association of America for the benefit of its members. Its pages are open to all members of the MAA and, by invitation to others, for the exchange of information and opinion. Contributed announcements, articles, and editorials are welcome and should be sent to the editor.

Material may be submitted on paper, by e-mail or on CD. Presently, this newsletter is produced using Microsoft Word, which can import plain text files or files produced by most standard word-processing software.

Opinions expressed in this newsletter are those of the editor or of individual contributors and do not necessarily represent the views of the MAA or of the Seaway Section.

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