THE SEAWAY CURRENT

Newsletter of the Seaway Section of the Mathematical Association of America

Fall **2024** Vol. 48, No. 1

IN THIS ISSUE...

- Upcoming Meeting
 - Friday Workshop
 - Invited Speakers
- Section Notes & Announcements
- Articles
- Section Reports
 - Treasurer's
 - Exec. & Ext. Exec. Committee

Business Meeting

ONLINE CONTENT:

(links work when material is posted)

- Fall 2024 Program
- Fall 2024 Contributed Talks
- Fall 2024 Student Talks

THE SEAWAY CURRENT

The Seaway Current is published at least twice per year by the Seaway Section of the Mathematical Association of America (MAA) 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 to the editor by e-mail. 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.

Editor

Elizabeth Wilcox, Assoc. Professor Department of Computer Science Oswego State University of NY tel. 315-312-6586 elizabeth.wilcox@oswego.edu

> On the web: maaseaway.org Facebook: @MAASeaway

SEAWAY SECTION FALL MEETING

Rochester Institute of Technology October 4-5, 2024 Register now!

Thank You to the RIT Math Department for hosting us!

FALL 2024: THE INVITED SPEAKERS

AUDREY MALAGON





SARAH HANUSCH





Audrey Malagon (MAA): Rebuilding our Mathematics Community

Sarah Hanusch (SUNY Oswego):

Improving student learning through written feedback

Gabriel Dorfsman-Hopkins (St. Lawrence University): Mathematical Illustration, Experimentation, and Exploration.

Join us for the Fall meeting in Rochester!

FALL 2024: THE FRIDAY WORKSHOP

Putting the Differential Back into Calculus

by Bud Boman (Penn State, Harrisburg campus) and Bob Rogers (SUNY Fredonia) 2:30-5:00, October 4

Workshop Fee: \$5. Advance registration required. See the registration form for details.

If you've always taught your students that dy/dx is not a quotient, then this workshop is for you!

Learn how it is more pedagogically sound to make the informal use of differentials (rather than limits) the focal point of a differential calculus course. Using problems and examples from a new open source textbook, this workshop will also show how this approach can make for a more meaningful problem-solving experience for your students. We will also discuss how integral calculus can be reorganized around the idea of summing differentials rather than Riemann sums. This is based on the realization that we integrate differentials, not functions.

This workshop welcomes all participants!

FALL 2024: SATURDAY INVITED SPEAKERS



Rebuilding our Mathematics Community Audrey Malagon, MAA

Abstract: Post-pandemic, students returned to classrooms and to campus, but nothing really returned to "normal." This talk is based on the article Welcome Back to the Math Lounge with Drs. Lydia Kennedy and Margaret Reese (Virginia Wesleyan University), which appeared in the Aug/Sep 2022 issue of FOCUS. I'll discuss my experiences as a faculty member and department chair working to rebuild and reinvent a vibrant community of mathematics students.

AUDREY MALAGON is Senior Director for Programs at the Mathematical Association America where she oversees a range of programs in support of the MAA's mission to "advance the understanding of mathematics and its impact on our world." Previously she was Professor and Chair of the Mathematics Department at Virginia Wesleyan University and Chair of Academic Assessment as well as chair of the MAA's Council on Teaching and Learning. From 2018-2022 she served as mathematical advisor to Verified Voting where she combined her technical expertise and administrative capabilities to advance initiatives, including the passage of the first pre-certification risk-limiting audit legislation in Virginia. At home, she has two stubborn but wonderful children, a husband Mark, and a mouthy husky who bosses us all around. Audrey holds a Ph.D. in mathematics from Emory University.



Improving student learning through written feedback: Addressing four challenges Sarah Hanusch, SUNY Oswego

Abstract: Do you find yourself spending hours writing feedback and then watching your students stuff it in their folders (or the trash) without looking at it? In this address, I will discuss my research on feedback and grading practices, and related studies from other researchers. Although my work focuses on student proofs, many of the challenges and solutions transcend subject matter. Four common challenges from written feedback are: (1) students don't look at it, (2) students don't understand it, (3) students can't apply it and (4) feedback may not be provided equitably. I will share strategies for addressing these problems in your own teaching practices.

SARAH HANUSCH is an associate professor of mathematics with a specialization in mathematics education at SUNY Oswego. Her primary research interests lie in the instruction of proof-intensive undergraduate courses. She is also an advocate for active learning pedagogy and is an officer of GUNYIBL Consortium. Outside of work, Sarah is known as: the mother of two young boys, an excellent cook and baker, and a licensed Zumba® instructor.



Mathematical Illustration, Experimentation, and Exploration. Gabriel Dorfsman-Hopkins, St. Lawrence University

Abstract: We will explore how illustration can be a powerful tool for mathematical research and exposition. We will give examples of illustrations of mathematics drawing from a broad array of techniques, including computer graphics, sculpture, digital fabrication, and fiber arts. We will share some applications of these techniques, explaining how some of these projects led to new mathematical theorems, while others led to art installations, and in at least one case, both.

GABRIEL DORFSMAN-HOPKINS (he/they) is an assistant professor of Mathematics at St. Lawrence University. They specialize in arithmetic and p-adic analytic geometry, with a particular interest in the use of perfectoid spaces. They also have research interests along the intersection of art and math, working with 3D printing, fiber arts, electronics, and other media, with an eye toward interactive models and installations. Gabriel completed their PhD at the University of Washington, and conducted postdoctoral research at Brown University and the University of California, Berkeley.

Looking for times and locations for the workshop and invited lectures?

Check out the online meeting program for all of the up-to-date details and information!

BOOK ANNOUNCEMENT

Mastering the History of Pure and Applied Mathematics Essays in Honor of Jesper Lützen

Toke Knudsen (SUNY Oneonta)

Mentors are invaluable in academia. In my career, I have been fortunate not only to have had mentors, but also to have been able to publicly celebrate three of them by coediting festschrifts in their honor. For those who may be unfamiliar with the term, a festschrift (a loanword from German meaning "celebration writing") is a book containing a collection of academic articles written to honor a noted scholar by their colleagues, former and current students, and other well-wishers. The articles in a festschrift can be reflections on the scholar's published works, but the volume can also be a collection of articles without any central theme with a focus instead on celebrating the scholar's career.

I was one of the editors of a festschrift celebrating Kenneth G. Zysk, Professor Emeritus of Indology at the University of Copenhagen, published in 2020¹, and an editor of a festschrift celebrating Christopher Z. Minkowski, Retired Boden Professor of Sanskrit at the University of Oxford, published in 2023.²

I would like to announce the publication of the third festschrift I have been an editor of. To honor our mentor Jesper Lützen, Professor Emeritus at the University of Copenhagen, Dr. Jessica Carter (Aarhus University) and I edited the festschrift *Mastering the History of Pure and Applied Mathematics: Essays in Honor of Jesper Lützen*, which was published by De Gruyter in May of this year. ³

A renowned historian of mathematics, Professor Lützen has had a long and productive career at the University of Copenhagen, Denmark. His scholarly contributions include the monumental *Joseph Liouville 1809–1882: Master of Pure and Applied Mathematics* (Springer, 1990),⁴ and more recently *A History of Mathematical Impossibility* (Oxford University Press, 2023). (*Continued on the next page*)

Report from the MAA Seaway Representative

Hossein Shahmohamad (2024-2028)

The 2024 MAA MathFest was held on August 7-10, 2024 this year in the city of Indianapolis, IN. Many talks, mini-courses, presentations and programs were offered over the 4-day event. The MAA Pavilion in the Exhibit Hall was one of the main attractions. Prizes, awards, backgammon games, bingo and Rubik's cube were all around. A Meet-and-Share event turned out to be quite popular for mathematicians' storytelling. Many city fun events such as Indiana State Fair, soccer, symphony, museums, and Indy craft were available to participants. Various SIGMAA business meetings were held among industry, government and mathematicians.

The MAA Congress (formerly known as The Board of Governors) met on August 7, 2024 and in a day-long meeting discussed many topics such as strategic plan, impact report, website updates, council roundtable, communication values, amendments to congress bylaws, election of atlarge members, and election process.

The 2025 MAA MathFest will be held on August 6-9, 2025 in Sacramento, CA.

Book Announcement continued ...



Figure 1: Left – Cover of *Mastering the History of Pure and Applied Mathematics: Essays in Honor of Jesper Lützen*. Middle – Professor Emeritus Jesper Lützen in 2012. Photo: Katja Thorseth.

Right – Dr. Kirsti Andersen (external examiner), Professor Jesper Lützen, and Toke Knudsen at the latter's master's thesis defense at the University of Copenhagen in August 2000. Photo: Gyda Lindegaard Knudsen.

Professor Lützen is also a masterful teacher, who is celebrated for his influential course on the history of mathematics at the University of Copenhagen. Through that course, many Danish secondary-level mathematics educators were exposed to his passion for the history of mathematics, in turn bringing the material into their own classrooms. More information about Professor Lützen's research and teaching is found in the introduction to the festschrift, which also includes a bibliography of his publications.

My own connection with Professor Lützen began with a far-away experience as an exchange student at Monash University, Australia, in the late 1990s. Captivated by Professor John Stillwell's lectures on the history of mathematics, I returned to the University of Copenhagen and sought out Professor Lützen, the mathematics department's historian of mathematics. Since those early days as an undergraduate, I have been fortunate that our discussions have continued throughout my academic career.

From the outset, Professor Lützen was kind and encouraging. One of his many good qualities is his curiosity and willingness to engage with new material, and he agreed to supervise a project on number theory in the works of two important Indian mathematicians, Brahmagupta (7th century CE) and Bhāskara II (12th century CE). Professor Lützen was an excellent advisor for the project. His passion for the history of mathematics and his sharp insights into the mathematical content helped me to acquire a good understanding of the material. Seeing Professor Lützen as a strong role model for clear and focused thinking, deep understanding, and time management, I did not hesitate to ask him if he would be the advisor for my master's thesis on mathematical methods in ancient Indian ritual, which he agreed to. Our weekly meetings allowed me to gain a deep understanding of the mathematics of the texts. As the work on the thesis progressed, I asked him about the possibility of doing a Ph.D. on ancient Indian mathematics. If I were to do that, he told me, I would have to learn Sanskrit to read the sources in the original language rather than rely on translations; and I soon after began my studies of that ancient language. After I defended my thesis and took more Sanskrit courses, I began my doctoral work on Indian astronomy under the late Professor David Pingree at Brown University. Since 2008, I have been at SUNY Oneonta, where I regularly teach our course on the history of mathematics.

During my sabbatical about ten years ago, Professor Lützen provided me with a visiting position at the University of Copenhagen. Besides the opportunity to conduct my own research, I was appointed Professor Lützen's Teaching Assistant for his course on the history of mathematics (a course I did not take as an undergraduate). I oversaw three-hour weekly meetings with students to work through mathematics problems from the course, and I helped conduct oral examinations at the end of the course. Professor Lützen's captivating lectures and careful course notes have remained an inspiration for my own teaching to this day.

¹ T. L. Knudsen, J. Schmidt-Madsen, and S. Speyer (Eds.), Body and Cosmos: Studies in Honor of Kenneth G. Zysk. Brill, 2020. https://rb.gy/i9jsib

² C. T. Fleming, T. L. Knudsen, A. Misra, and V. Sharma (Eds.), Science and Society in the Sanskrit World. Brill, 2023. https://rb.gy/ngn8j7

³ T. Knudsen and J. Carter (Eds.), Mastering the History of Pure and Applied Mathematics: Essays in Honor of Jesper Lützen. De Gruyter, 2024. https://doi.org/10.1515/9783110769968

⁴ The title of the festschrift, which was suggested to us by Professor Tom Archibald at Simon Fraser University, alludes to this work.



Figure 2: Professor Lützen delivers his retirement lecture, "The history of impossibility theorems and Arrow's impossibility theorem in particular," in December 2023. Photo: Jim Høyer.

I will always be indebted to Professor Lützen for all the advice, careful discussions, and other help that he has extended me over the years. I would not be where I am now without his help and continued support.

It is therefore with great pride that I announce to the members of the Seaway Section the publication of the festschrift for Professor Emeritus Jesper Lützen. The festschrift began to take shape in 2020 with Dr. Carter, a junior colleague of Professor Lützen, helpfully joining me as editor. The book was published in May 2024. The 11 articles in the volume are written by esteemed scholars, including colleagues and former students of Professor Lützen.

To introduce the contents of the festschrift, I am grateful that the Seaway Section's own Bob Rogers, Distinguished Teaching Professor Emeritus at SUNY Fredonia, kindly agreed to read the book and share his impressions with the readers of the Seaway Current. (Editor's Note: Please see p. 6 for the review.)

SUNY Plattsburgh's Dr. Robert Keever Visits SUNY Oneonta Toke Knudsen (SUNY Oneonta)

Following a kind invitation by Dr. Naveen Somasunderam, I visited the Department of Mathematics at SUNY Plattsburgh in April 2023 to give a talk. My visit to Plattsburgh was wonderful. The talk, which was on mathematical methods in the rituals of ancient India, went well, and I really enjoyed interacting with the mathematics faculty members. During one of the many great conversations I had, I learned that Dr. Robert "Rob" Keever, a longtime faculty member at SUNY Plattsburgh, earned a bachelor's degree in mathematics from SUNY Oneonta in 1982.

Since 2015, I have had an ongoing project to interview retired faculty members and former students from my department as part of an effort to preserve the department's history. Inviting Rob to visit SUNY Oneonta as part of that project was a no-brainer! (Cont. on p. 8)

Learning About Textbook Publication at SUNY Oneonta

Toke Knudsen (SUNY Oneonta)

Historically, about two-thirds (the current number is 59%) of the mathematics majors at SUNY Oneonta have been dual majors, majoring in adolescent education and mathematics. These students are preparing for a career as middle or high school mathematics teachers after graduation. As future educators, textbooks will be an integral part of their work. We tend to take textbooks for granted, and most people do not know the process behind the production of a textbook.

To help our students gain a better understanding of where textbooks come from, Dr. Elyssa Stoddard (Department of Secondary Education & Educational Technology, SUNY Oneonta) and I took the initiative to invite Ms. Lisa Samols, Executive Development Editor and Media Manager at BFW Publishers, to SUNY Oneonta to lead a workshop on textbook publishing. (Continued on p. 7)

BOOK REVIEW

Bob Rogers (SUNY Fredonia)

Review of *Mastering the History of Pure and Applied Mathematics: Essays in Honor of Jesper Lützen*, Toke Knudsen and Jessica Carter (Editors)

It might help the reader for me to provide my background. My degree is in pure mathematics (functional analysis), not the history of mathematics. I am interested in the heritage of mathematics (a term coined by Ivor Grattan-Guinness) and applying it to teaching mathematics. I am by no means an historian. For someone such as me, this collection of essays written by historians of mathematics and science provides a window into the serious study of the history of mathematics.

The essays span a broad range of topics and for the most part focus on the individuals who shaped various fields in mathematics and science. The three exceptions to this are the essays on how geometric themes from Greek antiquity resonated in the 19th century (to some extent), cognitive artifacts, and a comment on pre-Ptolemaic astronomy (to a greater degree). These essays focused more on the development of content (which I called "heritage"). There is another essay, the last one, entitled "What is the history of mathematics to twenty-first century mathematicians?" which focused on analyzing how people access digital information on history topics. When I started reading this particular essay, I thought that it should be the first essay as it started with André Weil's view that the history of mathematics should be the study of mathematical ideas rather than people, etc. However, after reading the entire article, it seemed appropriate to be at the end as it then focused on an analysis of people accessing digital information. Reading the beginning of this particular essay along with the others helped to solidify the history vs. heritage idea of Grattan-Guinness in my mind.

In a nutshell, the "history" of mathematics tends to focus on the people who developed the mathematical ideas with the content being the backdrop, while the "heritage" focuses on the content with the people providing the backdrop. For someone like me, who is not an historian, seeing this contrast in the essays would help in understanding the history aspect and help guide someone who wanted to pursue the history aspect more seriously. For the mathematics historian, this collection of essays provides access to a variety of history topics and contains a treasure trove of references. As with any larger work, there are some minor typos to deal with, but these are not grievous. In all, this book lives up to its title; it is an introduction into mastering the history of pure and applied mathematics. Fall 2024

Canisius College

In the past several years, many changes have taken place in the mathematics program at the recently renamed Canisius University. As of Fall 2021, mathematics lives in the new Department of Quantitative Sciences, along with computer science, data science, pre-engineering, physics, and master's programs in data analytics and cybersecurity. Since 2020, Terry Bisson, Jim Huard, and Chris Kinsey have transitioned to serving as Professors Emeriti. Three new Assistant Professors have entered the program. Nathan Fox (computational discrete mathematics and integer sequences) was hired in Fall 2020, Sana Spektor (broad interests in applied mathematics and data science) in Fall 2022, and Soumik Banerjee (multistage random sampling and clinical trials) in Fall 2023. As of Summer 2024, Sana Spektor now serves as the Director of the Data Analytics program. (Submitted by Nathan Fox)

Skidmore College

The Department of Mathematics and Statistics at Skidmore College is pleased to welcome Dr. Christopher Seaton to the Department as a Professor of Mathematics. Chris earned his Ph.D. from the University of Colorado, Boulder in 2004, and he joins us this fall after 20 years on the faculty in the Mathematics and Statistics Department at Rhodes College in Memphis, Tennessee. His research focuses on the geometry and topology of singular spaces, particularly orbifolds, singular symplectic quotients, and orbit spaces of Lie and topological groupoids. In his free time, he enjoys listening to and playing music, hiking, and chasing after his toddler. Please join us in welcoming Chris to the MAA Seaway Section! (Submitted by Patrick Daniels)

Utica University

Professor Hossein Behforooz will retire at the end of Fall 2024 after an esteemed 38-year tenure at Utica University. His passion for mathematics has been a source of inspiration for his colleagues throughout his career. We are also pleased to welcome Professor Shandeepa Wickramasinghe, who joined the faculty as a tenure-track Assistant Professor of Mathematics in Fall 2024. *(Submitted by Xiao Xiao)*

Learning About Textbook Publishing continued ...



Figure 3: Courtesy of Lisa Samols. Left – Lisa Samols in February 2024. Right – Slide from the workshop presentation that details the general timeframe for developing and publishing a textbook.

Note that the purpose of the workshop was not to promote a particular textbook published by BFW Publishers, but to provide an opportunity for students and faculty members at SUNY Oneonta to learn about the textbook publishing industry. The one-hour workshop, titled *Pages and eBooks: A discussion about publishing for tomorrow's high school STEM teacher*, was held on March 4, 2024. It attracted a good number of mathematics education majors as well as faculty members in mathematics education and mathematics. An acquisitions editor from the scholarly publishing house De Gruyter also attended.

Ms. Samols began the workshop with an overview of just how many people are involved in the creation of a textbook and what their specializations are. Many different types of authors are needed to create a textbook, including main text authors, teacher's edition authors, and test bank authors. It was noted that the main text authors usually are college professors, whereas the teacher's edition authors are active high school teachers. Similarly, many different editors are needed, including development editors and media editors (Ms. Samols's functions at BFW Publishers). Beyond authors and editors, there is the entire structure of the publishing company with all its various departments, including Marketing, Finance, and Human Resources.

Ms. Samols continued to tell the audience about her own career path. The purpose was to highlight the fact that the publishing industry offers many different career paths to mathematics teachers. From the questions posed by students during the workshop and later feedback sent to me, it was clear that the students were not aware of this potential career path.

Afterward, Ms. Samols discussed the general timeline of publishing a high school textbook. Ms. Samols then discussed what things BFW Publishers will consider when planning a textbook. For Advanced Placement (AP) textbooks, an important consideration is whether the curriculum has changed since the previous edition. Feedback from teachers on content, skill practice, assessment, and so on is an important consideration as well. BFW Publishers also consider how they can make their textbooks more inclusive, and how they can make use of online resources and still support students who can only use print products. External factors such as state budgets and state legislation are also considered.

Finally, Ms. Samols posed several questions to the audience to start a discussion: *How do you plan a course? How do you plan a class period? How do you accommodate different levels of preparedness among students?*

Throughout the workshop, Ms. Samols was gracious and articulate. Students could ask questions throughout the workshop, and Ms. Samols gave a thorough and respectful reply to every question that was raised. Several interesting discussions arose during the workshop, including how to resolve a situation where the high school teacher working on the teacher's edition of a textbook has concerns about how the material is presented by the main text author.

Several students provided positive feedback after the workshop. Two students wrote:

...I learned a lot yesterday. I was particularly happy to hear that teacher's editions for high school and AP course books were written by teachers who excel in the teaching of that content area; this is very helpful for when I am teaching and using these textbooks. ...Overall, it was a very valuable experience, and I am glad to have gotten to learn more about creating and publishing course materials!

I really enjoyed the workshop yesterday! It was interesting to learn about what goes into the production of a textbook. I never really thought about all of the little steps and different people that come together to write a textbook. I did feel as though the information was valuable.

Both students and faculty members at SUNY Oneonta thank Ms. Samols for coming to campus to give this wonderful workshop.

SUNY Plattsburgh's Dr. Robert Keever Visits SUNY Oneonta continued ...



Figure 4: Left – Rob Keever's yearbook photo from *Oneontan: the yearbook for 1982* (State University of New York College at Oneonta, 1982), kindly made available by Heather Stalter, Archives and Special Collections, Milne Library, SUNY Oneonta. Right – Elizabeth Cruz and Rob Keever after the interview. Photo: Toke Knudsen, 2024.

I teamed up with SUNY Oneonta's Office of Alumni Engagement, where Laura Lincoln, Director, and Brynn Havens, Coordinator of Recent Alumni and Student Programs, did a wonderful job formally inviting Rob and helping to plan the visit.

Rob and his wife Lori Keever arrived in Oneonta in the morning of Tuesday, March 19, 2024, and returned home the next day. It had been more than three decades since Rob last visited Oneonta, and he was excited to the see campus again as well as to show Lori his old favorite places downtown. The day started with a meeting with Dr. Charles Ragozzine, Chair of the Department of Mathematics, Computer Science, and Statistics at SUNY Oneonta. The meeting was followed by a lunch sponsored by the Office of Alumni Engagement. The lunch, which brought together faculty members from several academic departments at SUNY Oneonta, was full of good conversations.

After the lunch, my student Elizabeth Cruz conducted an interview with Rob. It was an interesting conversation. Rob shared many memories from his time as an undergraduate student at SUNY Oneonta. He told us that his passion for teaching mathematics arose when he as a member of the Peace Corps taught mathematics in a secondary school in Sierra Leone in West Africa, which led to his Ph.D. studies at the University of Edinburgh in Scotland and subsequent career as a mathematics professor at SUNY Plattsburgh.

After the interview, Rob, Lori, and I went on a long walk around campus. We visited different buildings, including Milne Library, and we went to find Rob's old dorm room. We ended the walk with a visit to SUNY Oneonta's Office of Global Education, where Rob had a conversation with Michelle Lopez, Director, and Denise Leinonen, Global Program Coordinator, about his experiences studying abroad.



Figure 5: Rob and Lori Keever in front of the Pillars at SUNY Oneonta. Photo: Toke Knudsen, 2024.

The day ended with a dinner, also sponsored by the Office of Alumni Engagement, attended by students and faculty members from the Department of Mathematics, Computer Science, and Statistics, as well as Tracy Allen, Dean of SUNY Oneonta's School of Sciences. Like the lunch, the dinner was full of good conversations.

The next morning, before their departure for Plattsburgh, Rob and Lori visited my *History of Mathematics* class. The students in the class were playing Rithmomachia, a medieval mathematical board game, facilitated by my talented student Emily Petramale.¹ It was great to have Rob and Lori interact with the students and learn the rules of Rithmomachia with them.



Figure 6: Left – Group photo after the dinner. Rob and Lori Keever, center, are surrounded by Dean Tracy Allen; faculty members Leah Bridgers, Jonathan Brown, Angeie Kazas-Pontisakos, Toke Knudsen, and Lynne Talbot; and students Dylan Bellinger, Elizabeth Cruz, Danielle Grima, Jacob Spoor, and Matthew Zatz. Photo: Gerry Raymonda, 2024. Right – Rob Keever observes students Olivia Bucciero and Dylan Bellinger set up the Rithmomachia game board. Photo: Gerry Raymonda, 2024.

It is always wonderful to visit other institutions in the Seaway Section, and it is equally wonderful to host visitors from those institutions. My visit to SUNY Plattsburgh shows that an academic talk can be a wonderful way to bring our mathematical community together. Dr. Keever's visit to SUNY Oneonta shows that there are other ways besides academic talks to bring us together. Whatever form these gatherings take, I hope that this report about Dr. Keever's successful visit to SUNY Oneonta will inspire more of them.



Figure 7: Toke Knudsen, Lori Keever, Emily Petramale, and Rob Keever in the *History of Mathematics* class. Photo: Gerry Raymonda, 2024.

¹ Emily and I have worked on a project on Rithmomachia for some time, and we are in the process of writing an article about the board game. For more information about our project, see this blog post (https://rb.gy/qpyf35) from Milne Library!

1. TREASURER'S REPORT – FALL 2024 Gordon Craig, Seaway Section Treasurer

Contrary to what I stated in the previous treasurer's report, I'll be presenting the budget and financial statement at the spring meeting, instead of providing the budget in the fall and the financial statement in the spring. The reason for this is that there is still a fair amount of variability in the net cost to the section of the meetings, which are far and away our biggest budget element. Registrations, and therefore revenues, are quite unpredictable (the location and the date of the meeting clearly play a role, but what exactly it is remains unclear), while local expenses are very different from one host institution to another. The level of the subvention (our annual payment from the MAA) has also varied quite a lot over the past few years, and has yet to stabilize.

Thanks to yet another excellent local organizing team, we continued a streak of at least breaking even on meetings, with Spring 2024 in Fredonia generating a surplus of \$574.53 for the section. With the current state of affair in higher education, it is, however, becoming more and more difficult to find host institutions, and we cannot expect this happy state of affairs to continue. My own personal experience is that I had the support of my chair to host a meeting at York University in Toronto in the spring of 2025, but a university-wide spending freeze put the kibosh on the project.

We also need to consider raising the registration fees for our meetings, which have been fixed for a long time, to keep pace with inflation. Between now and the fall meeting at RIT, I'll reach out to treasurers of other sections to see how much they charge, and also what their meetings consist of. (Nancy Ann Neudauer of the Pacific Northwest Section was present at the Spring meeting, and explained what their meetings looked like, and I was surprised at how different they were from ours, so we want to make sure that we're comparing apples to apples with other sections.)

The executive committee approved an increase in the level of honoria for invited speakers from \$100 (a level at which it had stayed for two decades) to \$150 in order to keep up with inflation.

And for those who have made it through this entire report, I'd like to inform you that there will be Seaway Section merchandise for sale at the fall meeting at RIT! This is a great way to support the section, while obtaining stylish swag for friends, family, colleagues, enemies and absolute strangers.

Respectfully submitted,

Gordon Craig (Glendon College [York University]), Seaway Section Treasurer

2. THE EXECUTIVE & EXTENDED EXECUTIVE COMMITTEE MEETING – April 19, 2024

Present at Start: Cesar Aguilar (Program Chair, Webmaster), Leah Bridgers (Chair), Gordon Craig (Treasurer), Jane Cushman (Education and Policy Committee), Brad Emmons (Chair Elect), Jolie Roat (Secretary)

Joined Meeting After Seaway NExT Program: Jeff Johannes (Section Representative, Liaison Coordinator), Dan Look (Randolph Lecture Chair), Nancy Ann Neulander (MAA Associate Secretary), Houssein Shahmohamad (Distinguished Teaching Award Chair)

Approval of minutes from Fall 2023 Executive Committee meetings

• Approved, no dissent

Reports from officers

(1) Chair (Leah Bridgers)

Cesar will be resigning from the program chair position. Elizabeth Wilcox has been chosen to fill out the remainder of Cesar's term. This will vacate the At-Large Member position, which will be filled by Jeff Johannes. There was discussion about updating the list of committee membership. Brad Emmons will start working on updating this.

(2) Chair Elect (Brad Emmons)

No report.

(3) Program Chair (Cesar Aguilar)

The numbers for this section meeting are up from the fall meeting. At the time of this report, there were 91 registered participants (30 undergraduate students) and 14 contributed talks (7 student talks). The next fall meeting will be held Oct. 4-5 at RIT. Two of the three Saturday speakers have been confirmed.

(4) Treasurer (Gordon Craig)

Gordon will be reaching out to other sections to see how our registration fees compare to others. It has informally been decided that the Honoria for speakers will be increasing from \$100 to \$150. The "Hosting Guidelines" document currently states "\$100 is common" for host institutions. There was discussion about changing this number in the guidelines.

At this meeting there was a situation where someone who had registered couldn't attend and inquired about a refund policy. There is no such policy currently. There was discussion regarding what this might look like. It was proposed to refund the banquet up until the deadline for the venue, and refund registration minus credit card fees up until the Friday of the meeting. Gordon will draft a policy.

At the business meeting, the budget and financial statements will be presented. We broke even on the meetings last year.

Finally, when the "Hosting Guidelines" document was drafted, the host institution was collecting the money for registration, but the Section is collecting it now. This has led to the need to clarify who pays for local student helpers, for example, to attend the banquet. It was proposed that we put language in the guidelines that we will cover the banquet fees for up to 5 student helpers.

- (5) Secretary (Jolie Roat) No report.
- (6) Two-Year College Representative (Claudio DiMarco) No report.

Report from the Section Representative (Jeff Johannes) No report.

Reports from committees and other Extended Executive Committee officers

- (1) Program Committee (Cesar Aguilar) See program chair's report.
- (2) Student Program Committee (Keiko Dow) There will be a "careers in math" panel at this meeting with five panelists. The committee will be working on a panel for RIT meeting in the fall.
- (3) Randolph Lecture Committee (Dan Look) Sarah Hanusch from SUNY Oswego has been selected for the fall meeting.
- (4) Gehman Lecture Committee (Darren Narayan) Gordon will be introducing the speaker on Saturday.
- (5) Educational Policy Committee (Jane Cushman) AP Precalculus will now be offered for high school students. This should have an influence on standardizing precalculus across the state.
- (6) "Clarence Stevens" Distinguished Teaching Award Committee (Hossein Shahmohamad) Joe Petrillo from Alfred was selected this year. He is unable to attend this weekend, but an announcement will be made during the banquet.
- (7) Nominations Committee (Gary Towsley)See chair's report regarding the shuffling of positions.
- (8) Seaway NExT Advisory Committee The committee planned a successful event for the Friday of this meeting.

- (9) Distinguished Lecturer Committee (David Brown) No report — it is unclear if this committee is still active.
- (10) Liaison Coordinator (Jeff Johannes) No report.
- (11) Seaway Current Editor (Elizabeth Wilcox) Currents have been published and are available on our website.
- (12) Webmaster (Cesar Aguilar) A few updates have been made to make it easier for future program chairs to make edits to registrations and abstracts.
- (13) Public Information Officer (Christine Uhl) No report.

Old Business

Update on bylaws process
 We will be officially voting on the bylaw changes at the business meeting this weekend.

New Business

(1) Merchandise

There was discussion regarding the status and procedures of selling merchandise. When pricing the items we are hoping to break even. The goal is to sell everything and not end up with a backlog of leftover items. The merchandise person will be working closely with the treasurer.

Motion to approve \$10 purchase for a new Square card reader. Motion approved.

- MAA Associate Secretary
 Nancy Ann Neulander was in attendance as a visitor from the MAA and will be one of the invited speakers on
 Saturday. She shared some information about how her section organizes their meetings.
- (3) Future Meetings

RIT is confirmed for Fall 2024. Potentially, Spring 2025 will be at SUNY Oneonta and Fall 2025 will be at St. Lawrence University. There is still concern that the cost of hosting may be a deterrent. It was suggested that some institutions may have a "special lecturer" fund they could tap into if they make it a public talk.

Respectfully submitted, Jolie Roat (SUNY Cortland)

3. THE BUSINESS MEETING – April 20, 2024

Section Members in Attendance: 28

Reports from Officers

(1) Chair (Leah Bridgers)

Began by extending a special thank you to Bob Rogers, Cesar Aguilar and Claudio DiMarco for their service to the Seaway Section. Elizabeth Wilcox will be appointed as program chair to finish Cesar's term and Jeff Johannes will be stepping into the At Large member role to replace Elizabeth. Houssein Shahmohamad has been elected as the next Section Representative.

- (2) Section Representative (Jeff Johannes) No report.
- (3) Treasurer (Gordon Craig)

Our finances are currently stable however inflation and financial pressures on potential host institutions is a concern for the future. Elizabeth Wilcox has merchandise to be sold and the 2023 Financial Statement and 2024 budge can be found in the Current.

Questions posed from attendees:

• How much does a meeting typically cost? Typically we set the price for registration and banquet with the aim

of breaking even. This meeting cost about \$6000.

- *How does the merchandise get to a meeting if Elizabeth is unable to attend? Is it shipped? Would it make sense in the future for people to order online?* At this time, taking on the task of dealing with shipping is more than we want to ask the merchandise person. We are not currently using a "print on demand" model. The merchandise is priced to break even. There was a suggestion to give the merchandise at the end of a meeting to the next host.
- (4) Program Chair (Cesar Aguilar)

There are 93 total registered participants this weekend. The next meeting will be held at RIT on October 4-5. The local host will be Darren Narayan. Sarah Hanusch has been selected as the Randolph Lecturer and Audrey Malagon is an invited speaker.

Old Business

(1) Bylaws vote

There is a proposed revision to Article III, Paragraph 4 related to elections and terms of officers. Motion to amend.

Vote held: 28 For, 0 Against. Motion Approved.

New Business

(1) Elections

The positions of Treasurer and Two-Year College Representative are up for election. The sole candidate for Treasurer is Gordon Craig and the sole candidate for Two-Year College Representative is Jesse Clark-Stone. Both elected by unanimous consent.

(2) Associate Secretary of the MAA

Nancy Ann Neulander, Associate Secretary of the MAA, was in attendance as a representative of MAA. She reported that the MAA appreciates what the section does of creating meetings and getting students involved. One problem that has been noticed is attracting faculty or students from research institutions. Suggestions and discussion related to this was invited.

- A suggestion was made for having special sessions or expanding the ideas of Project NExT to attract late stage graduate students from R1 institutions such as how to maintain a research agenda or how to become a teacher in a school that is different than their own.
- A suggestion was made of asking invited speakers to be involved in the Section NExT workshop in some way.
- A comment was made that the move of national meetings to conference centers rather than universities has led to a drift apart from R1 institutions. It was suggested to have section meetings at R1 institutions or invite people from R1 institutions to be speakers.
- A comment was made that the MAA seems to be losing connection with Pi Mu Epsilon. Nancy explained that when the AMS restructured the Joint Meetings, Pi Mu Epsilon already had a three-year commitment. They have had many conversations to get them back to MathFest, however January is usually easier to get students involved.
- A suggestion was made to grow the liaison program into two-year colleges as well.
- A suggestion was made to host a joint meeting with an AMS sectional.

Respectfully submitted, Jolie Roat (SUNY Cortland)