# THE SEAWAY CURRENT

Newsletter of the Seaway Section of the Mathematical Association of America

### Early Fall 2020 Vol. 43, No. 6

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#### 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 Mathematics Oswego State University of NY tel. 315-312-6586 elizabeth.wilcox@oswego.edu

Check us out on Facebook! @MAASeaway

# Seaway Team Challenge!

You and your Math Club have to get in on the fun! You'll get to make a video ... But, what will you be making a video of??

Find out!

# The In-Person FALL 2020 Seaway Section meeting has been cancelled.

Originally planned as an in-person meeting in October at Siena College in Loudonville, New York, it became clear early in the summer that hosting a large in-person gathering would not be safe or reasonable. The Executive Committee regretfully decided to cancel the in-person meeting. Thank you to our local organizer, Mohammad Javaheri, and Siena College for volunteering to host the traditional fall meeting and for your understanding during this challenging time. We hope to return to the Siena campus in the future. Thank you!

# But you can still Sea-a-way through fall with the

# Virtual Fall Seaway Conference!

The Seaway Section's Program Chair, Brad Emmons, is gathering together a fall program to provide community and opportunities for mental mastication. It's free to participate in these events so invite your friends, students, and colleagues to participate.

Date(s)	Event
9/10	Confronting Mathematical Microaggressions:
	A Small Start Towards Inclusivity
9/17	Real Analysis: a conversation about the content
	in a standard offering
9/24	Panel on Graduate Schools
10/8	Coordinating Groupwork Remotely (panel)
11/9 - 11/15	Submissions for the Seaway Team Challenge are due
11/19	Game Night!
	-

# We hope you will join us! Register online today.

And if you want to organize an event this fall or afterwards, get in touch with your Program Chair (bemmons@utica.edu). The sky is the limit! Constructive feedback on the events and the program is also appreciated.

# So much has happened over the summer ...

- We have a new webpage get the scoop from the creators!
- The Section History is getting updated and we need YOUR input!
- Check out the committee listing for 2020-2022.
- Get caught up on the Seaway Summer Series events.
- Get in on the excitement! Share your ideas with Brad Emmons and be part of the program!

Stay connected and be on the leading edge of news in the Section: Become the liaison for your department!

Contact Jeff Johannes to get on the liaison email list.

# FALL 2020 EVENT SCHEDULE

These events are free and open to participation by individuals from across the section and beyond. We require registration to track participation levels as part of the section's reports to the national organization. Additionally, we use email addresses provided at registration to contact participants ahead of the event with reminders or event content. On occasion we will use email addresses provided at registration to advertise future events, but only with a small number of emails and mindful of overflowing inboxes.

Some events may be recorded, either with video, audio, or both, and participants will be notified at the start of the event if and how recording will occur and how the recording will be shared afterwards.

Events typically are on Thursdays, 4 pm - 5 pm, unless marked with a  $\star$ . Most events will be held over Zoom, and the meeting room will open some time before the start of the event so that participants can enter, introduce, chat, etc. before the event begins.

September 10, 4 pm - 5 pm Confronting Mathematical Microaggressions: A Small Start Towards Inclusivity Facilitators: Jane Cushman (Buffalo State College), Sarah Hanusch (SUNY Oswego), and Elizabeth Wilcox (SUNY Oswego) Registration Form

*Description:* The Merriam-Webster dictionary defines a microaggression as "a comment or action that subtly and often unconsciously or unintentionally expresses a prejudiced attitude toward a member of a marginalized group (such as a racial minority)." Whether we realize or not, we all bring microaggressions into our communications with others — even into the classroom. What are some of these microaggressions that we might be committing in the classroom? How can we become more mindful of microaggressions? Join us for a discussion, centered on Francis Su's 2015 articles, *Mathematical Microaggressions* and *The Secret Mathematical Menu*, from MAA Focus. Links to freely available versions of the articles will be provided upon registration.

Stick around for an organizational meeting about a planned monthly discussion group focusing on inclusivity and justice in the mathematics community.

### September 17, 4 pm - 5 pm Real Analysis: a conversation about the content in a standard offering Facilitators: Gary Towsley (SUNY Geneseo) and Elizabeth Wilcox (SUNY Oswego) Registration Form

*Description:* Let's have a discussion around three issues connected to the mathematical content of one of our standard mathematics courses: Real Analysis. It's time to discuss the actual course content of such a course, the various pedagogies used in such a course, and the purposes for which a text is used in the course.

To begin the discussion Gary Towsley would like to offer a chapter from a Real Analysis text that he has been writing over the last many years, the chapter on Completeness. He's not looking for a review of the text at all. Completeness gets at a fundamental decision that a department or a faculty member makes in teaching Real Analysis — How do I define the Real Numbers for this course?

After registration, participants will be sent a copy of the table of contents, the introduction, and the chapter on Completeness from Gary's text. It is planned that this text will become a freely available resource for teachers of Real Analysis. Participants will also be provided with the MAA CUPM report excerpt on Real Analysis and pointed towards other freely available resources on Real Analysis to provide added sources for discussion.

### September 24, 4 pm - 5 pm Panel on Graduate Schools Organized by: Keiko Dow (D'Youville College), Keith Jones (SUNY Oneonta), and Ahmad Almomani (SUNY Geneseo) Registration Form

*Description:* Are you considering whether or not you should apply to a graduate program in mathematics, mathematics education, statistics, or applied mathematics? Then you definitely need to come to this panel! Current graduate students

will be on hand to talk about their graduate experience and answer your questions.

**Do you know a graduate student in their second year, or later, who would be a great addition to the panel?** Get in touch with Keiko Dow (dowk@dyc.edu)!

October 8, 4 pm - 5 pm **Coordinating Groupwork Remotely (a panel discussion) Facilitator:** Brad Emmons (Utica College) **Panelists:** Angelynn R. Álvarez (SUNY Potsdam), Jeff Johannes (SUNY Geneseo), and Daniel Look (St. Lawrence University) **Registration Form** 

*Description:* What are some techniques for effectively coordinating groups in remote classes? What techniques from in-person classes translate well to remote classes, and which don't? In this panel discussion, we'll learn some of the techniques that our colleagues have used and discuss how effective those techniques have been.

\*Ongoing, with submission due November 9 - 15 Seaway Team Challenge Organizers: Keiko Dow (D'Youville College) and Christine Uhl (St. Bonaventure University)

*Description:* Attention MAA Seaway Section members! Does your student math club have what it takes to compete in this semester's Seaway Team Challenge?!?! Video submissions are due November 9th-15th, posted to the MAA Seaway Facebook group. Your challenge: Post a video of your group cutting a bagel into two equal halves that are linked together. See this National Museum of Mathematics blog post by George Hart for a picture and statement of the problem. Using resources (internet or other) are allowed. As the winning submission will be chosen based on the number of likes, you are encouraged to be creative and entertaining in your videos. Don't forget to tell your friends and family to vote by liking your submission!

\*November 19, 7 pm - 8:30 pm Game Show! Facilitators: Ryan Gantner (St. John Fisher College) and Blair Madore (SUNY Potsdam)

*Description:* What semester would be complete without a game show! Our lively hosts, Blair Madore and Ryan Ganter, are back to entertain and challenge players with an end-of-semester evening of fun and relaxation. They write:

Join us for Math Trivia Night. We'll ask some questions. You'll give us some answers. It'll be fun! All are welcome to come. Students are especially encouraged, and are eligible for 'huge' cash prizes.

More details to follow as the semester progresses; alert your students early so they can mark their calendars and gather their teams.

# A Request from Gary Towsley, Seaway Section Historian:

With the launch of the new website I have updated most of the files on the history of the section in the Archives pages. We have in the Archives histories of the section for each of the 25 year periods - 1940 - 1965, 1965- 1990, and 1990 - 2015. I plan to submit an update to the narrative history of the section for the past 5 years, 2015 - 2020.

**I need your help:** Would you send me anything you think needs to be remembered from the Seaway Section over the last 5 years? It only needs to be a phrase — like "The use of Paypal at meeting registration" — so that I do not leave out anything important. You can email me your response at towsleyg@geneseo.edu.

Thank you!

Gary Towsley SUNY Geneseo



Your section merchant is Blair Madore.

Send him an email (madorebf@potsdam.edu) for info on what's available and how to procure it. And send your suggestions for new swag, too!

# A Note from the Section Chair

Cheryl Chute Miller, State University of New York at Potsdam

As we try to recover from our sudden shift to online teaching last spring, and many of us prepare to continue teaching virtually this fall or possibly longer, remember that the MAA Seaway Section is here to keep us all connected. We all missed the Spring 2020 meeting that had to be cancelled, but the summer workshops organized by Elizabeth Wilcox and Brad Emmons have been a wonderful chance to "see" one another and discuss things that went well or need more careful thought. I hope you were able to participate in at least one of the events, they were very well attended and had strong discussions. I attended them all and learned valuable tips from each one.



- 1. *Lessons from Spring for Fall* a panel discussion with Brad Emmons (Utica College), Robin Sanders (Buffalo State College), Bronlyn Wassink (Michigan State University)
- 2. *Talking Math Online with LaTeX* presented by Keith Jones (SUNY Oneonta) [video presentation]
- 3. *Online Exams: Can cheating be thwarted*? a panel discussion with Steve Kilner (Monroe Community College), Marie Langlois (Cornell University), and Rachel Skipper (the Ohio State University) [content folder — summary – audio recording – transcript]
- 4. Scaling Up Inquiry-Based Learning for In-Person and Virtual Large-Sized Classrooms presented by Shay Fuchs (University of Toronto-Mississauga) [content folder summary references]
- 5. *How Has COVID-19 Changed our Academic Life? A Conversation on Faculty Performance and Evaluation* presented by Mihail Barbosu (RIT), Maureen Cox (St. Bonaventure University), Brad Emmons (Utica College), and Rebecca Smith (SUNY Brockport).

Along with these, we also had a Happy Hour and Demo Jam, where participants discussed the various technology that they used to make things like writing during class and grading easier.

This was an incredible plan created by outgoing Program Chair Elizabeth Wilcox (and you see our incoming Program Chair listed there a few times as well, Brad Emmons). She worked tirelessly to keep us all connected and help everyone feel better about what they tried in the spring. I hope you will all help me thank her for this when you get the chance (email works, elizabeth.wilcox@oswego.edu).

Unfortunately the chance for a face-to-face fall meeting quickly ended during the summer. The Executive Committee voted to have a series of events that will take place during the semester, designed to enhance the community, of students and faculty, that makes the Seaway Section so strong. Please look for announcements about events this fall; Brad Emmons, Program Chair, is already making plans so if you have ideas for an event be sure to reach out to him (bemmons@utica.edu).

As Chair of the Seaway Section I am proud to see the wonderful response by our members to any call for action and justice. The Seaway Section Executive Committee approved a statement on Black Lives Matter (adapted from a statement by the Michigan MAA). If you have not seen it, look at our website for the statement.

Finally, speaking of our website, did you know we have a new one? Go to maaseaway.org and you will find the new (almost complete) site that is fantastic. Thanks to Ryan Gantner for all of his work getting us to this point and to Cesar Aguilar, our new webmaster, for his work setting it up. Again, let Cesar know what you think of it or if you have ideas for items to include (aguilar@geneseo.edu).

Please stay well until we can finally be back together face-to-face, and connect with us at some events this fall!

Cheryl Chute Miller (State University of New York at Potsdam), Seaway Section Chair

# NEW SEAWAY SECTION WEBSITE: maaseaway.org

#### by Cesar Aguilar (SUNY Geneseo) and Ryan Gantner (St. John Fisher College)



At its 2020 spring meeting (which was held virtually in June due to the cancellation of the Spring Meeting in Waterloo), the Executive Committee tasked the Website and Registration Committee to revamp the section's website. The Seaway Section has had a website since 1996 as noted by Gary Towsley in Chapter 5 of the Narrative History of the Seaway Section:

The section had its first web page and web site active for the Spring 1996 meeting at Elmira College. The webmaster was Dietrich Kappe and it was housed at his corporation. It moved to Binghamton University where the new webmaster was Fernando Guzman. The website moved in 2009 to RIT with Anurag Agrawal as webmaster.

The members of the Seaway Section are grateful for Anurag's tireless work and determination as the section's webmaster for well over a decade. Thank you Anurag!

The main roles of the section's website has been and will continue to be the following:

- Information: Recent news, announcements, upcoming meetings and other events.
- Archives: History of the section, previous meetings and speakers, previous officers and award winners, previous governors, and the Seaway Current.
- Parliamentary: Posting of nominees for official positions, reports from the Section Representative and Treasurer, and business meeting minutes.
- Directory: Listing of current officers and committee members.

In addition to the historical roles of the website, the new website adds  $\dots$  Continued on page 6.

# A NOTE ON LETEX AND DESMOS VIDEOS

by Keith Jones (SUNY Oneonta)

As part of the MAA Seaway Summer Series, I gave a workshop on ways we can use LaTeX to discuss mathematics online. We covered:

- MathJax, which provides a convenient and beautiful solution to displaying mathematics;
- a variety of web platforms that support at least basic LaTeX notation, categorized into educational discussion (such as Piazza and Perusall), general communication (Slack and Discord), Document Creation (such as Google Docs, Overleaf, etc.), Graphing (Desmos and Geogebra), and the virtual bulletin board Padlet; and finally,
- an overview of support for LaTeX on popular learning management systems, such as Blackboard and Moodle. Most platforms have some builtin support for using LaTeX mathematics. While built-in support is often not ideal, it can usually allow both you and students to easily include at least basic mathematical notation in online discussions. Some systems (such as Blackboard) allow an instructor to copy & paste the necessary HTML to utilize MathJax, which can offer a much more readable mathematics experience, though the areas in which this is possible may be limited.

A video recording of the workshop is available. Additionally, I wrote up a few blog posts on these topics for those who wish to explore the related web resources further.

Also, over the past few years, I have become quite a fan of including the online graphing tool **Desmos** in my classes, since it is free and very accessible to students. By accessible, I mean that its interface is among the most intuitive to work with and it does not require any log-in for students. It stands out among similar tools for requiring a minimal amount of orientation to get working with it. As I considered moving my classes online, I began to think more seriously about making interactive demonstrations available with Desmos, ...

Continued on page 6.

# NEW SECTION WEBSITE

(CONTINUED FROM PAGE 5)

the following features:

- Accessibility: The website is fully responsive to various screen sizes (phones, tablets, laptops, desktops), is accessible using only keyboard input, and incorporates the W3C Web Accessibility Initiative standards including WAI-ARIA.
- Local Meetings: The new website will be the central location for all future local meetings sites. Previously, the websites to the local meetings were hosted at the hosting institution which made it difficult for the sites to persist after the end of the meeting.
- Automation: In addition to providing a central location for local meetings, local organizers will use a simple form entry system to input all relevant details of a meeting such as the program, invited speakers, schedule of contributed and student talks, directions and parking, and housing information, and all relevant pages will be automatically created with a navigation menu.
- LaTeX Compatibility: Text containing LaTeX mathematical mark-up, and in particular talk abstracts, will be rendered using the JavaScript library MathJax which is managed by the AMS.
- Shared Management: The new website uses the Drupal content management system (used by 71% of the top 100 universities) which at its core is designed to allow multiple users to administer and add content to the website.

A couple of features not currently on the new website that might be incorporated in the future are:

- Registration for and abstract submission to meetings.
- Posting recorded videos/audio of talks/discussions at meetings.

The Website and Registration Committee is looking forward to hearing your feedback and suggestions on the new website. What features would you like to see?

# A NOTE ON LATEX AND DESMOS (CONTINUED FROM PAGE 5)

and I started exploring creating Desmos "Activities," which nicely package demonstrations in a guided process, allowing students to explore, try things out, and submit answers to the instructor or the whole class. I created a couple of videos demonstrating the usefulness Desmos:

- I first show how you can create in just a few minutes, for example, an interactive illustration of Riemann Sums.
- I then provide an overview of Desmos Activities, and illustrate embedding them in an online class page,
- I write a few words about Desmos and what I cover in these videos.

Desmos graphs and activities can become quite sophisticated, but a lot of thought has been put into making their creation accessible to nonprogrammers. There exist many activities already out there which one can often find with we web search like "Desmos Activity Venn Diagrams"; some of these might be suitable for dropping right into your class. But if you want to create your own or modify existing activities, you'll find that by exploring a few existing activities, you'll quickly pick up the ideas needed to have the custom activities you want for you class.

I should note that I am not affiliated or otherwise in contact with the creators of Desmos or any of the software I've mentioned here, but I am a fan of the functionality they offer.

# NEWS FROM GUNYIBL:

The Greater Upstate New York IBL Consortium (GUNYIBL) invites you to submit an abstract for our virtual Seminar Series. Each seminar will consist of a 30-40 minute presentation or demonstration of a lesson or project that worked well for you, followed by 20-30 minutes for questions and discussion. We are seeking a diverse field of topics, so you may discuss something for pre-covid, socially distanced, hybrid, or online classrooms. Abstracts will be reviewed on a rolling basis, but we suggest applying by September 4, 2020 for full consideration. Please send an abstract of no more than 250 words. We especially encourage people from underrepresented groups and junior faculty to submit an abstract. An honorarium is provided by MLI for each speaker in this series. Once your abstract is accepted for the series, we will work with you to schedule the exact date and time. Other updates from GUNYIBL:

- GUNYIBL now has a Slack channel at unyibl.slack.com where we have space to discuss all things IBL and activelearning related, as well as share resources and support.
- On Saturday, August 6, GUNYIBL held a virtual panel "IBL Practices for the Online Classroom" featuring four panelists from across the country with experience in active learning online. The panelists included Tien Chih of Montana State University, Billings, Amanda Matson of Clarke University, Kyle Petersen of DePaul University, and Patrick X. Rault of University of Nebraska at Oklahoma STEM TRAIL Center. A recording of the panel is available.

# PRODUCT REVIEW: SLATE FOR TOP HAT SUBMITTED BY BRONLYN WASSINK

I will be using a new product this Fall called Slate, which is a product of Top Hat. I have been testing it out with my TAs over the past week, and it has some very nice features. Slate community tools are listed as a product that is included with Top Hat Basic, which is currently free for students and professors. (Check out the pricing scheme.) The best place to ask questions about specifics of the products is with the support team.

Slate is similar to Microsoft Teams, but with some improvements. On Slate, students can communicate with their entire class or with a small private group, and small private groups can be set up by the professor or by the students themselves. I'll be setting up smaller groups for students to do group work, which I will use instead of breakout rooms in Zoom this semester. A drawback of Slate is that the small group set-up must be done manually - there is no easy shortcut like Zoom's ability to upload predefined groups for breakout rooms using a simple .csv file.

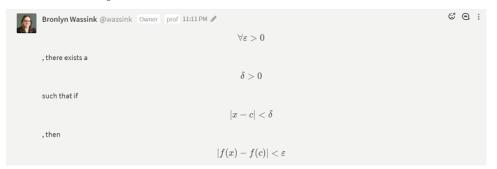
On Slate, students (and TAs and the professor) can write posts using text, video messages, audio messages, or uploading images. Also, within the whole-class or a smaller group, there is an option for group calls with a screen sharing option - very much like Zoom or Microsoft Teams. Slate has an app and a desktop version. My TAs have tested both - they like the app, but prefer the desktop version.

One feature that Slate has that might be particularly appealing to mathematicians is that the text-based posts allow KaTeX (a form of LaTeX that can be used on desktop or mobile applications).

Clicking the \[KaTex\] under the message creation box will provide a link to the supported KaTeX codes. This can be useful for students who feel more comfortable copying and pasting codes as a template.



The codes must all be inside the  $[ \]$  commands in order for the KaTeX to be properly displayed. It can be a little awkward at times because it doesn't write equations inline with text; the command  $[ \]$  (forall  $\]$  varepsilon > 0 ], there exists a  $[ \]$  delta > 0 ] such that if  $[ \]$  x-c| <  $\]$  delta ], then  $[ \]$  (c)  $\|$  ( $\]$  varepsilon ] will create a post where each KaTeX component has its own line.



Aside from this issue, I think it's an excellent product. I'm hoping it's a good way for students to be able to communicate with each other, particularly those who are taking all classes online.

	Bronlyn Wassink @wassink Owner prof 2:36 PM I		
A Contraction	This is also a good way for students to be able to ask for help with their code. If they don't use a \ [ (with no space) before the code and a \ ] (with no		
	space) after the code, it will display as text. So students can ask the class:		
	Why is my code not working?!? 😭 I tried \begin{bmatrix}		
	a & b \\		
	c & d		
	\end{bmatrix} and got weird 's in the output:		
	$egin{bmatrix} < br > a & b \ < br > c & d < br > \end{bmatrix}$		

Clicking on the "1 reply":

This is also a good way for students to b… $\times$
output: $egin{bmatrix} < br > a & b \ < br > c & d < br > \end{bmatrix}$
Bronlyn Wassink @wassink 2:40 PM Copying and pasting from the KaTeX site sometimes adds weird line breaks. Try removing line breaks and typing it all in one line. \begin{bmatrix} a & b \\ c & d \end{bmatrix}. Once you've put it inside the slash-brackets, it will look like this: $\begin{bmatrix} a & b \\ c & d \end{bmatrix}$
⊙ Message ♀ +

Students can also use emojis and give reactions to posts. This gives Slate a non-threatening and informal feel, which hopefully increases student engagement.

P.	Bronlyn Wassink @wassink Owner prof 11:28 AM TAs - if you are reading this message, please try to reply! Use the little icon that looks like a speech bubble that appears in the upper right side of the post when you mouse-over the post! 🔆 💻 🚯 🤓 😂
	€ 6 replies August 21, 2020 3:44 PM
	Bronlyn Wassink @wassink Owner prof 9:49 AM   Image: Second Sec

Since I've never used Slate in a course before, I'm not entirely sure how it will work with all the students active on the site. I'm optimistic that the students will enjoy interacting with classmates this way, and it's free, so I don't have anything to lose.

Ready to share your review of other software or tools? Want to tell the section about a recent (virtual) conference that you've attended? How about brainstorm a wish list of the conferences, panels, workshops that you wish you could attend?

Contact the Seaway Current editor, Elizabeth Wilcox, and get published!

# **SEAWAY SECTION COMMITTEES**

2020-2022

#### **Executive Committee**

Chair – Cheryl Chute Miller Secretary – Gary Raduns Section Representative – Charlie Ragozzine Two Year College Rep – Steve Kilmer Chair Elect – Leah Bridgers Program Chair – Brad Emmons Treasurer – Gordon Craig At-Large Member – Elizabeth Wilcox

#### **Program Committee**

Brad Emmons (Program Chair) Marlo Brown Jeff Johannes

#### Gehman Lecture Committee

Darren Narayan (current Chair) Shay Fuchs Kathleen Kavanagh Gordon Craig (Leah Bridgers, ex-officio)

#### Randolph Lecture Committee

Blair Madore (current Chair) Jane Cushman Joe Rusinko Jayleen Wangle (Steve Kilner, ex-officio)

#### Clarence Stephens Distinguished Teaching Award Committee

Keary Howard (current Chair) Laura Person Cheri Boyd Hossein Shahmohamad (Gary Raduns, ex-offico)

#### **Student Program Committee**

Keiko Dow (current Chair) Keith Jones Ahmad Almomani

#### **Educational Policy Committee**

Jane Cushman (current Chair) Tedi Cox Sarah Hanusch Katelynn Kochalski (Charlie Ragozzine, ex officio)

#### Nominations Committee

Gary Towsley (Chair) Ryan Gantner Patti Frazer Lock Jolie Roat

#### Seaway NExT Advisory Committee

Dan Visscher (current Chair) Keiko Dow Nate Reff Adam Giambrone

# Seaway Distinguished Lecturer Committee (Ad Hoc)

David Brown Joel Louwsma Jeff Johannes (Gordon Craig, ex-officio)

#### Committee on Website and Registration (Ad Hoc)

Ryan Gantner (current Chair) Luis Mareno Anurag Agarwal Nate Reff Gary Towsley

#### **Additional Section Positions**

Elizabeth Wilcox, Seaway Current Editor Jeff Johannes, Liaison Coordinator Christine Uhl, Public Information Officer Cesar Aguilar, Webmaster Bob Rogers, Committee on Venues

There is no time like the present to get involved in your community, especially the *mathematical* community here in the Seaway Section. Looking for a way to get started? Talk to anyone on this list!