

## Lightning talk session: speakers, titles, and abstracts

4pm ET on Saturday, April 24  
paraDIGMS 2021 Spring Conference

Benjamin Braun  
University of Kentucky

*Supporting first-year students in their transition to graduate study and teaching*

During the past five years, the University of Kentucky Mathematics department has created several initiatives to support first-year graduate students in their transition to graduate study and teaching. In this talk, I will discuss our "early orientation" program for new graduate students.

Julie Bergner  
University of Virginia

*Designing an effective Bridge to the Doctorate program*

Last fall, our department welcomed three students in a new university-wide "Bridge to the Doctorate" program for underrepresented students who need further preparation before applying to PhD programs. We have had to ask many questions about how this program should go: what kinds of students should we admit? What classes should we suggest that they take? How can we provide good mentoring for them? In this talk, I'll share some of our answers, and how we are looking ahead to our second cohort next year.

Sam Evens  
University of Notre Dame

*Promoting Diversity at Notre Dame*

I will relate our efforts at Notre Dame to make our graduate program more diverse.

Jasmine Camero and Andrés R. Vindas Meléndez  
Emory University and University of Kentucky

*Math SWAGGER: Building a Virtual Community*

We will introduce the Mathematics Summer Workshop for Achieving Greater Graduate Educational Readiness (math SWAGGER—[www.mathswagger.com](http://www.mathswagger.com)) which was a five-week virtual summer program for any underrepresented student (including women, underrepresented minorities—African Americans, American Indians including Native Alaskans, Latinxs/Hispanics, and Native Pacific Islanders—and persons with disabilities) who began a mathematical/statistical graduate program in Fall 2020. Through the workshop we discussed topics centered on the challenges faced by underrepresented students in those programs. The program is facilitated by a group of underrepresented mathematicians with broad experience in supporting student success.

(short break)

Rachel Levy  
American Mathematical Society  
*Five things about the job market for math grad students*

The current job market has a vast variety of opportunities for people with quantitative and analytical expertise. I'll share 5 things that can help you navigate a job search, whether it be in industry, government or academia.

Sofía Martínez, Seppo Niemi-Colvin, and Sarah Percival  
Purdue University, Duke University, and Purdue University  
*We all have something to GAIN!*

In this presentation we will advertise an upcoming event, GAIN (Graduates Achieving Inclusion Now) which aims to empower both faculty and graduate students to converse about issues of discrimination and systemic inequity as they pertain to graduate students. Our event will inform faculty members of the problems and potential solutions with respect to the following topics: racism, sexism, homophobia and transphobia, ableism and mental health, allyship and mentoring, and measuring graduate success.

Anne M. Ho  
University of Tennessee  
*Observations from Small-Scale Master's Programs*

When comparing notes about our small-scale master's programs in our paraDIGMS working group, we found that our priorities, needs, and available resources appear to differ significantly from those of larger PhD programs. In this talk, we present alternate takes on the working group discussion questions as well as highlights from our respective programs.

Michelle Manes  
National Science Foundation  
*Two new funding opportunities from NSF*

The Mathematics and Physical Sciences (MPS) directorate at NSF has established two new programs, both with an explicit goal of broadening participation to include members from groups underrepresented in the Mathematical and Physical Sciences, including Blacks and African Americans, Hispanics, Native Americans, Alaska Natives, and Native Hawaiians, and other Pacific Islanders. MPS-Ascend (deadline June 15) is a Postdoctoral Research Fellowship, similar in some ways to the more familiar NSF postdoc (MSPRF) but with a distinct and definite focus on the candidate's contributions to improving diversity in math and physical sciences. LEAPS-MPS (deadline June 14) is a program designed to help launch the careers of pre-tenure faculty in Mathematical and Physical Sciences (MPS) fields at minority-serving institutions (MSIs), predominantly undergraduate institutions (PUIs), and Carnegie Research 2 (R2) universities. I'll briefly introduce both programs and give pointers for where to find more information about them.