

# SIGMAA IBL

# Virtual Workshop Series



## Spring 2026

Get ready for our spring lineup of virtual workshops, hosted by the Special Interest Group of the MAA on Inquiry-Based Learning!



See our past events on our website!



**Zoom Link:** [tinyurl.com/sigmaa-ibl-series](https://tinyurl.com/sigmaa-ibl-series)



[sigmaa.maa.org/ibl/events](https://sigmaa.maa.org/ibl/events)

Jan  
22nd

## Advocating for Racial Equity in Inquiry-Based Learning

Christopher C. Jett

Thursday, January 22<sup>nd</sup> at 2pm EST



Feb  
24th

## Fostering Students' Mathematical Creativity in Inquiry-Based Classrooms Through Tasks and Reflection

Gulden Karakok

Tuesday, Feb 24<sup>th</sup> at 3pm EST

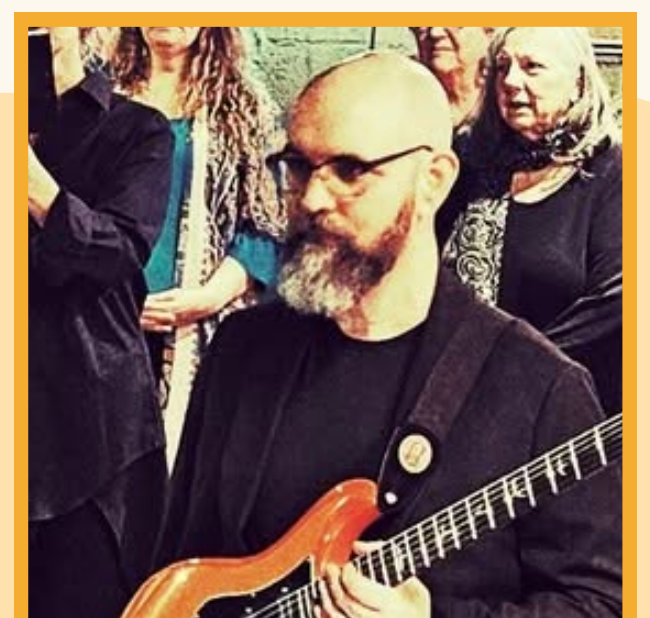


Mar  
25th

## Explore, Conjecture, Apply, Prove: A framework for writing IBL lessons

Jeff Ford

Wednesday, Mar 25<sup>th</sup> at 4:30pm EDT



Apr  
27th

## Exploring Extrema in Calculus

Natalie Naehrig

Monday, Apr 27<sup>th</sup> at 1pm EDT





## Advocating for Racial Equity in Inquiry-Based Learning

**Christopher C. Jett**

Thursday, January 22<sup>nd</sup> at 2pm EST

In this workshop, attendees will learn more about the growing body of knowledge regarding racial equity. This knowledge will be paired with what is known about inquiry-based learning (IBL). In addition, attendees will engage in an activity and leave the workshop with some ideas for moving racial equity forward in IBL settings.



Dr. Christopher C. Jett is an Associate Professor of Mathematics Education at Georgia State University. His research explores Black boys' and men's mathematical and racialized experiences. His work has been funded by the National Science Foundation (NSF), New Venture Fund, and the U.S. Department of Education. He received an NSF CAREER Award, the 2019 Early Career Award from the Association of Mathematics Teacher Educators (AMTE), and a Presidential Early Career Award for Scientists and Engineers (PECASE). He is the author of *Black Male Success in Higher Education: How the Mathematical Brotherhood Empowers a Collegiate Community to Thrive*.



## Fostering Students' Mathematical Creativity in Inquiry-Based Classrooms Through Tasks and Reflection

**Gulden Karakok**

Tuesday, Feb 24<sup>th</sup> at 3pm EST

Human creativity remains one of the most sought-after skills in scientific disciplines, and students need opportunities to develop their mathematical creativity. In this session, we will explore how instructional practices in an inquiry-focused mathematics classroom provide opportunities to enhance students' mathematical creativity. Attendees will leave with concrete strategies for designing tasks and facilitating discussions that enhance students' experiences of mathematics as a creative and dynamic domain.



Gulden Karakok is a Professor of Mathematics Education at the University of Northern Colorado. Her research focuses on undergraduate students' mathematical creativity, problem solving, and transfer of learning. She is a member of the [Creativity Research Group \(CRG\)](#) and contributes to work on creativity-fostering tasks and task-design framework, and student reflection instruments, with recent work on intersectionality of mathematical creativity and identity. She has co-facilitated and co-designed professional development sessions on inquiry-based learning and the MAA's *Instructional Practices Guide*. She is also the co-director of the Northern Colorado Math Circles program and enjoys facilitating Math Circles sessions for middle and secondary mathematics teachers and students.



# SIGMAA IBL Spring 2026 Workshop Series

## Explore, Conjecture, Apply, Prove: A Framework for Writing IBL Lessons

**Jeff Ford**

Wednesday, Mar 25<sup>th</sup> at 4:30pm EDT

First developed by Tom LoFaro, this framework helps us lay out scaffolded questions in a way that leads to students learning with a minimal amount of faculty interference. Students have the responsibility to prepare to learn, the ability to work together to grasp the more difficult concepts, and a means to demonstrate mastery of those concepts. We will discuss how to progress through these 4 stages in writing questions, using linear algebra as a framework.



Jeff Ford was exposed to inquiry based learning as a graduate student at Auburn University in 2014 and has never turned back. He has been developing IBL question sets for courses for the last 10 years. He is currently a visiting assistant professor at Gustavus Adolphus College.



## Exploring Extrema in Calculus

**Natalie Naehrig**

Monday, Apr 27<sup>th</sup> at 1pm EDT

Students often learn by heart how to find absolute extrema of a (well behaved) function on a closed interval. Why we do what we do is not always clear and the protocol might soon be forgotten - until it reoccurs in two-variable functions and becomes even more confusing. In this session, we will use tools like Desmos to understand the meaning of extrema and to grasp the difference between local and absolute extrema. We will look at carefully chosen examples and deduce a way to catch absolute extrema no matter where it is located.



Natalie is an Associate Teaching Professor of Mathematics at the University of Washington where she has been teaching undergraduate students for over a decade, with a particular focus on introductory (100-level) courses. Her teaching philosophy centers on evidence-based practices that promote engagement, exploration, and deep conceptual understanding. In her (pre-)calculus classes, for example, students investigate mathematical ideas through interactive Desmos activities and poll competitions that reinforce properties of trigonometric functions. Natalie's foremost goal as an educator is to help students build lasting intuition and confidence in mathematics.