



Jameel Al-Aidroos Mathematical Pedagogy Lecture Series

October 17, 2022

Harvard University Science Center, Lecture Hall E

Program

3 p.m. - 3:50 p.m.

Aubrey Clayton

Thinking Slowly about Probability and Statistics

Abstract: The fields of probability and statistics, along with the many STEM disciplines that depend on them, are currently in crisis due to widespread misunderstandings of the fundamental definitions and core concepts. Without a solid foundation, students will naturally struggle when they encounter tricky and counterintuitive phenomena in their real-life experiments or observational data. When we try to think too fast about probability and statistics, we're most in danger of falling into their traps. In this talk I'll outline the challenges imperiling these subjects and argue that the remedy lies in asking probing questions about the basic ideas and being unafraid to think slowly and methodically through the answers.

3:50 p.m. - 4 p.m.

Break

4 p.m. - 4:50 p.m.

Juliana Belding

Working with Secondary Math Teachers: What Mathematicians can Offer and Learn

Abstract: In this talk, I'll share about an ongoing NSF grant to support a learning community with 14 experienced math teachers in high-needs schools in the Boston area, focused on content, equity and leadership. This is a collaboration between faculty in the Math department and the School of Education at BC, the Educational Development Center (EDC), and the teachers themselves.

I'll briefly share the goals and activities of the grant, and then reflect on what mathematicians can offer and learn while mentoring and working with secondary math teachers. At the end, we'll discuss more generally ways to get involved in work with secondary teachers - please bring your experiences and questions!

5 p.m. - 6 p.m.

Refreshments in The Austine & Chilton McDonnell Common Room, Science Center 4th floor.