CAROLINE JUNKINS & JESSIE MEANWELL, McMaster University

Takeaways from MacPRIME: partnering with undergraduates to foster and sustain a mathematical learning community

With growing interest in STEM fields such as Data Science and Financial Mathematics, enrollment in undergraduate Math and Stats programs at McMaster University has been increasing over the past several years. As numbers grow, how can we be more intentional about fostering and sustaining an effective learning community? In 2022, the Department of Mathematics and Statistics piloted a summer bridge program aimed to build community and prepare students for university. The McMaster Peer-Run Inclusive Math Experience (MacPRIME) is a 4-week online program for incoming first-year Math and Stats students, developed and facilitated in partnership with upper-level undergraduates. In this talk, we will describe key takeaways from our development process, including:

1. Tailoring evidence-based teaching and learning strategies to a mathematically-inclined audience

2. Translating program objectives into interactive lessons using teacher.desmos.com

3. Setting up a sustainable ecosystem where undergraduates can move through the community from MacPRIME participants to instructors.