

Student Seminar Series

Organized by AMS Graduate Student Chapter at SIUC

The AMS Student Chapter at SIUC is organizing the **Student Seminar Series** on **Fridays at 4:00 pm** for all graduate students. This series is to be run by the students, for the students; providing a platform for us to practice speaking in a friendly environment. The topics can be anything and everything including what we are currently researching or any topic that interests us immensely.

All the graduate students are invited to **participate either by giving a talk or by being present at this seminar**. If you are participating in an important seminar, you can take this opportunity as a practice session.

- *September 23, 2022*

Speaker: Mostak Ahammed, *SIUC*

Title: Constrained inference in a scaled linear mixed model for multiple outcomes

Date: 09-23-2022

Time: 4:00 - 5:00 pm

Place: Neckers 156

Abstract: The problem of analyzing multiple outcomes arises frequently in many fields of bio-medical research. A global measure of the exposure effects on the original scales of the outcomes could be misleading. One example is discussed using Junior School Project data. In many practical settings, the fixed effects may be subject to constraints. So, in case of scaled linear mixed model (SLMM), we propose an estimation procedure which accounts for constraints on the fixed effect parameter β . A simulated data analysis result is followed which justifies the method.

- *October 7, 2022*

Speaker: Mohammed Alshamrani, *SIUC*

Title: Realization of Simple Smale Flows Using N-band Template (n=3)

Date: 10-07-2022

Time: 4:00 - 5:00 pm

Place: Neckers 156

Abstract: We study simple Smale flows on 3-sphere and other 3-manifolds modeled by a three-bands template on 3-sphere using tools from knot theory and template theory.