



BGSU

Department of
**Mathematics and
Statistics**

BOWLING GREEN STATE UNIVERSITY

Weekly Calendar – Spring Semester 2025

Week 4 – February 3 – 7

Monday, February 3	
Tuesday, February 4	<p>Graduate Student Seminar 11:30am – 12:30pm, McLeod Hall 459 Speaker: Kadir Yucel Title: Operator Theory of Resistance Networks</p> <p>Math 1150 Meeting 12:40pm – 1:20pm, McLeod Hall 222</p> <p>Foundational Math Committee 2:30pm – 3:30pm, McLeod Hall 459</p>
Wednesday, February 5	<p>Analysis Reading Seminar 2:30pm – 3:30pm, McLeod Hall 459 Speaker: Kit Chan Title: A Few Basic Facts about Locally Convex Spaces, Part 2</p> <p>Advisory Committee 3:30pm – 4:30pm, McLeod Hall 400</p>
Thursday, February 6	
Friday, February 7	<p>Colloquium 3:45pm – 5:00pm, McLeod Hall 459 Speaker: Josiah Philip Leinbach, BGSU Title: A Hidden Markov Model (HMM) Approach to Authorship Attribution of Disputed New Testament Books</p>

ABSTRACTS

Graduate Student Seminar

Title: Operator Theory of Resistance Networks

Abstract: We study resistance networks using the Hilbert spaces of functions defined on them: $\mathcal{H}_{\mathcal{E}}$ and \mathcal{H}_D . We examine currents, potential functions, and functions defined via the discrete Laplacian—dipoles, monopoles, and harmonic functions—alongside their probabilistic interpretations in terms of transience and recurrence. Our discussion is based on *Operator Theory and Analysis of Infinite Networks* by Jorgensen and Pearse.

Colloquium

Title: A Hidden Markov Model (HMM) Approach to Authorship Attribution of Disputed New Testament Books

Abstract: Many New Testament scholars have doubted that the Apostle Paul wrote all the letters attributed to him in the Christian New Testament. Three books in particular—1 Timothy, 2 Timothy, and Titus—have drawn the most criticism over the past century on account of their having a so-called "non-Pauline style". When a Hidden Markov Model is applied to the parts-of-speech tags in the Greek text, we can better classify what is a "Pauline" and "non-Pauline" style and show whether these books were written by the Apostle Paul.