BGSU Department of Mathematics and Statistics

BOWLING GREEN STATE UNIVERSITY

Weekly Calendar – Fall Semester 2024
Week 4 – September 16 – September 20

Monday, September 16	**Advisory Committee** 1:30pm – 2:30pm, McLeod Hall 400 **Putnam Team Meeting** 2:30pm – 3:20pm, McLeod Hall 459
Tuesday, September 17	**Graduate Student Seminar** 11:30am – 12:15pm, McLeod Hall 459 Speaker: Enoch Fedah Title: Euler Characteristic of Generalized Stirling Complex **Peer Mentor Leaders Meeting** 12:30pm – 1:30pm, McLeod Hall 459 **Foundational Math Committee** 3:30pm – 4:20pm, McLeod Hall 459
Wednesday, September 18	
Thursday, September 19	**Graduate Committee** 10:00am – 11:00am, McLeod Hall 400
Friday, September 20	**Analysis Reading Seminar** 11:30am – 12:30pm, McLeod Hall 459 Speaker: Salma Hasannejad Title: Basic Facts about Hypercyclic Operators, Part 2. **Math 1150 Meeting** 12:30pm – 1:00pm, McLeod Hall 459 **Colloquium** 3:45pm – 5:00pm, McLeod Hall 459 Speaker: Deep Karki Title: Modified Information Criterion for Change Point Detection with its Application to Simple Linear Regression Models

ABSTRACT

Colloquium

Title: Modified Information Criterion for Change Point Detection with its Application to Simple Linear Regression Models

Abstract: Identifying change points in data is crucial for extracting meaningful insights and avoiding potential losses. In the early 1970s, Hirotugu Akaike introduced the Akaike Information Criterion (AIC), followed by Schwarz's improved version in 1978, known as the Schwarz Information Criterion (SIC). SIC serves as an asymptotic approximation to a transformation of the Bayesian posterior probability of a candidate model. This presentation will explore the statistical analysis of regression models using the Modified Information Criterion (MIC) introduced by Chen et al. (2006) and compare it with SIC. Simulations have been conducted for each criterion to evaluate their performances, followed by the application of MIC on three datasets, two of which have been previously tested for change points detection. The only distinction between the two criteria lies in their penalty terms. The objective of this work is to assess their performance and identify the better approach for extracting meaningful insights after detecting change points.