## Mathematics Department Colloquium

Speaker: Dr. Juming Pan, Department of Mathematics, Rowan University

Title: Model Averaging for High-Dimensional Linear Models

Date and Time: Tuesday, October 1, 2019 at 2:00pm

## Place: James 2101

**Abstract**: Model averaging has attracted increasing attention in recent years for the analysis of high-dimensional data. By weighting several competing statistical models suitably, model averaging attempts to achieve stable and improved prediction. To obtain a better under- standing of the available model averaging methods, this talk is devoted to make a review on some recent progresses. In addition, we develop a new approach that combines strengths of model selection and model averaging, where the weight of each model is determined by its Bayesian information criterion (BIC) score and its frequency. Simulations and empirical examples are presented to illustrate the effectiveness of the proposed method.