

**RYERSON UNIVERSITY**  
**DEPARTMENT OF MATHEMATICS**  
**COLLOQUIUM**

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Date: Thursday, November 21, 2019

Time: 12:10 pm

Location: ENG-LG12

## **Recent Advances in Portfolio Optimization**

**Abstract:** In the current environment of low interest-rate, time-varying covariances, uncertainty in the market and heavy regulations in the insurance and banking sectors, finding an optimal investment of capital is one of the most important challenges financial companies face. This presentation describes some of these challenges using a combination of mathematical and financial concepts, including but not limited to: expected utility theory, optimal control, constrained portfolio optimization and continuous-time processes. Closed-form solutions to some of these problems are presented with an emphasis on their financial implications and benefits on a comparison to existing practices. In this context, we highlight some open problems and promising new approaches.

ALL FACULTY, STAFF, STUDENTS AND GUESTS ARE WELCOME TO ATTEND