

# GRADUATE SEMINAR

**Bolaji Elegbe**

Simulating the arrival and inter-arrival times  
of point processes

*Msc Student supervised by Taehan Bae*

December 7, 2017

9:30 AM – 10:30 AM

Math Lounge (CW307.20)

**Abstract:** Aiming at generating multivariate economic scenarios, the simulation of arrival and inter-arrival times of stochastic processes plays a key role in risk modelling and management. In this talk the theoretical properties of arrival and inter-arrival times of Poisson processes will be reviewed. The development of a bivariate Poisson process with various time dependence structures will also be discussed. Finally, an idea to extend the simulation method for a bivariate negative binomial process will be introduced.