



## Statistics and Actuarial Science Seminar

**Title:** Poisson network autoregression

**Speaker:** Konstantinos Fokianos (University of Cyprus)

**Date:** Thu 12th October 2023 at 3:00PM

**Location:** E0.32 (beside Pi restaurant)

**Abstract:** We consider network autoregressive models for count data with a non-random neighbourhood structure. The main methodological contribution is the development of conditions that guarantee stability and valid statistical inference for such models. We consider both cases of fixed and increasing network dimension and we show that quasi-likelihood inference provides consistent and asymptotically normally distributed estimators. The work is complemented by simulation results and a data example.