Statistics and Actuarial Science Seminar

Title: pdglasso: an R package for Gaussian graphical models for paired data

Speaker: Saverio Ranciati (University of Bologna)

Date: Thu 26th February 2026 at 3:00PM

Location: E0.32 (beside Pi restaurant)

Abstract: In this talk we present the pdglasso, an approach for statistical inference with Gaussian graphical models on paired data, that is when there are exactly two dependent groups and the interest lies on learning the two networks together with their across-graph association structure. The modeling framework contains coloured graphical models and, more precisely, a subfamily of RCON models suited to deal with paired data. Algorithmic implementation, relevant submodels, and maximum likelihood estimates are discussed. We also illustrate the associated R package 'pdglasso', its main contents and usage. Results on simulated and real-data environments are discussed at the end.

(Jointly organized with the School of Computer Science and Statistics of Trinity College Dublin)