On latent and selection nodes in graphical models for binary variables

A seminar by Elena Stanghellini

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Room Benvenuti
Department of Statistical Sciences

I will discuss the distortions induced by marginalization and conditioning on some parameters of interest in systems of binary random variables. Marginalization accounts for unobserved confounders while conditioning accounts for some kind of nonrandom sampling, such as case-control or self-selection. Recent results embedded in the framework of causal inference and mediation analysis will be presented, also for stratified case-control sampling. I shall discuss point identification as well as sensitivity analysis. Links to nonparametric modelling will also be made. An instance where the introduction of a latent variable is beneficial will also be presented.