

Non-parametric Causal Inference

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There are three main frameworks for causal inference: counterfactuals (aka potential outcomes), non-parametric structural equation models (NPSEMs) and graphs (aka path diagrams). These approaches are similar and, in certain specific respects, equivalent. However, there are important conceptual differences and each formulation has its own strengths and weaknesses. These divergences are of relevance both in theory and when the approaches are applied in practice. This talk will introduce the different frameworks, and describe, through examples, both the commonalities and dissimilarities.