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## Luca Weihs, Bill Robinson\* (robinsonw@denison.edu), Emilie Dufresne, Jennifer Kenkel, Kaie Kubjas, Reginald Reginald II, Nhan Nguyen, Elina Robeva and Mathias Drton. Determinantal Generalizations of Instrumental Variables.

Linear structural equation models are a class of multivariate statistical models which study possible causal dependencies among variables. To these is associated a path diagram, which contain a directed acyclic part and a bidirected part. When a model has been specified, it is of interest to determine whether the model parameters can be recovered from the covariance matrix which they define. In this talk we will discuss recent work on the question of identifiability using algebraic methods. (Received September 26, 2018)