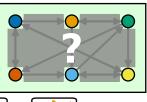
Unknown network Directed, unweighted

network with unknown structure and observable nodes

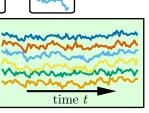


Observe dynamics on nodes



Time-series data

Realization of a linear stochastic-difference equation with inverse sampling rate Δt

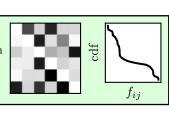


Compute pairwise edge measures

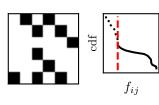
 $\mathbf{S}^{(k)} = \langle \mathbf{x}_{t+k\Delta t} \mathbf{x}_t^T \rangle$ $f_{ij} = [\mathbf{S}^{(1)} - \alpha \mathbf{S}^{(0)}]_{ij}$

PEM matrix

Linear combination of correlation and crosscorrelation matrices



Threshold pairwise edge measures



Inferred network

Structure of a directed, unweighted network

