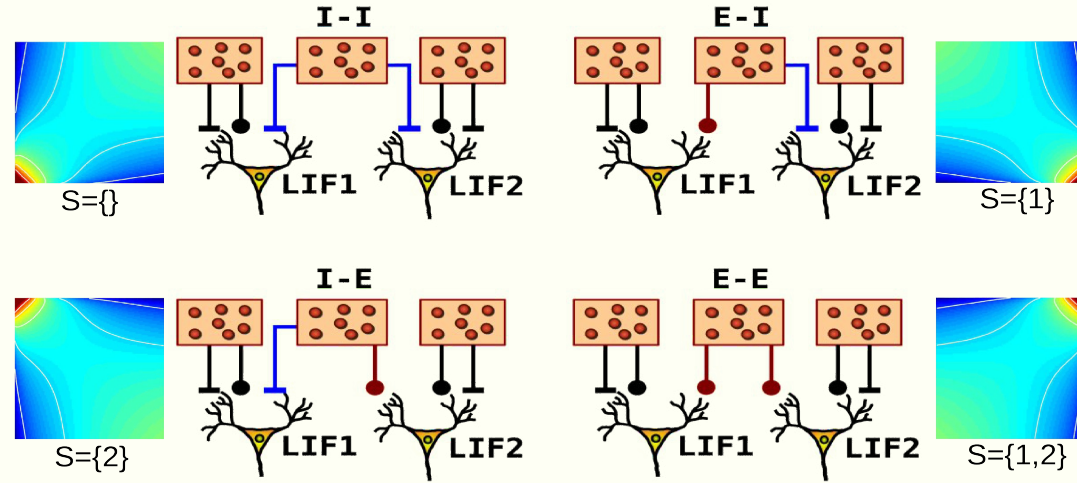


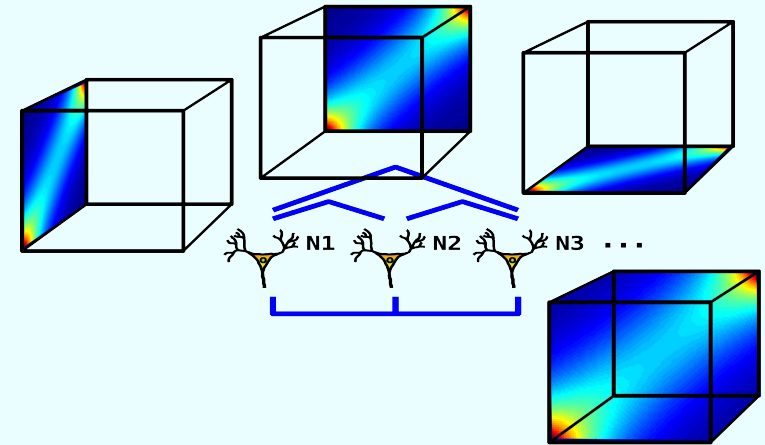
Applications of Copulas in Neuroscience

Arno Onken, Steffen Grünewälder, Matthias H. J. Munk, Klaus Obermayer

- Novel copula transformation for modeling neural spike count distributions of particular network structures



- Frank mixture family for modeling higher-order dependencies
- Improved fit for varying second- and third-order network input



- Goodness-of-fit test based on semi-parametric reference model
- Correction for Poisson-like marginals

