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# Structured Interaction in Game Theory

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**Michael Kearns**

Department of Computer and Information Science  
University of Pennsylvania  
Philadelphia, Pennsylvania

## **Abstract**

Over the last several years, a number of authors have developed graph-theoretic or network models for large-population game theory. In such models, each player or organization is represented by a vertex in a graph, and payoffs are determined by the actions of only those in the neighborhood of a player. This allows the detailed specification of social, organizational, biological and other types of structure in the strategic interaction of the population.

In this talk, I will survey these models and the attendant algorithms for certain basic computations, including Nash and correlated equilibria. Generalizations to macroeconomic models will be discussed, as well as potential connections to social network theory and the emerging field of neuroeconomics.

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