

## Abstracts

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*Community Structure of Networks and its Applications*

Networks are everywhere. Some examples are the World Wide Web, the Internet, gene networks and metabolic pathways. One important research area is in the identification of community structure in networks. Communities are groups of vertices within which connections are dense and among which connections are sparse. In this talk, I will review some of the methods developed including spectral graph partitioning, edge removal based on betweenness measures and optimization of the modularity function. Also, recent developments on finding overlapping community structure will be discussed.