Title: Centrality Measure for Opinion Dynamics (joint with Igal Milchtaich and Yevgeny Tsodikovich)

Abstract:

We propose a centrality measure for opinion dynamics that utilizes the game-theoretic concept of ``authority distribution'' due to Hu and Shapley (2003). An axiomatic foundation is given in the tradition of coalitional game theory. Several extensions are developed. A novelty of our approach is that it is based on opinion exchange dynamics rather than network topology. However, for any fixed exchange dynamics, our approach associates a network centrality measure with any given network topology. Previous as well as new network centrality measures are obtained in this way.