

The Flow of Information in Complex Networks

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The study of complex networks has emerged over the past several years as a theme spanning many disciplines, ranging from mathematics and computer science to the social and biological sciences. A significant amount of recent work in this area has focused on the development of probabilistic and algorithmic models that capture some of the qualitative properties observed in large-scale network data; such models have the potential to help us reason, at a general level, about the ways in which real-world networks are organized. We focus here on a set of research questions related to the flow of information through such networks, with a particular emphasis on mathematical models for information flow in human social networks and their reflections in the on-line world.

Kuwait Lecture 93

11 June 2009

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