



Spread and Interaction of Epidemics and Information on Adaptive Social Networks

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Field: Applied Mathematics, Degree: Ph.D.

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Abstract

The spread of diseases and opinions has profoundly affected the development of human societies. The structure of the underlying social network may change as a result of individuals changing their social connections in response to an ongoing epidemic or opinion spreading, either for self-protection or as an expression of personal values. The interaction of spreading processes and the underlying network structure has been a focus of many recent studies. In this dissertation, we construct models to better incorporate heterogeneous responses to disease spread and attempted opinion spread.