Department of Applied Mathematics and Statistics
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SEMINAR

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Friday, February 6, 2004
304 Whitehead Hall
Refreshments: **10:30 a.m.**
Seminar: **11:00 a.m.**

EPIDEMICS, ERDŐS NUMBERS, AND THE INTERNET: THE STRUCTURE AND FUNCTION OF NETWORKS

Abstract

Many systems take the form of networks: Distribution networks, social networks, the Internet, citation networks, food webs, and neural networks are just a few examples. I will show some recent empirical results on the structure of these and other networks, particularly emphasizing degree sequences, clustering, and mixing patterns. I will also discuss some models of networks that incorporate these features, and give examples of how both empirical measurements and models can lead to interesting and useful predictions about the real world.