The **Mathematical Sciences Research Institute** and the **American Mathematical Society**

Cordially invite you to a lunch briefing on Capitol Hill entitled

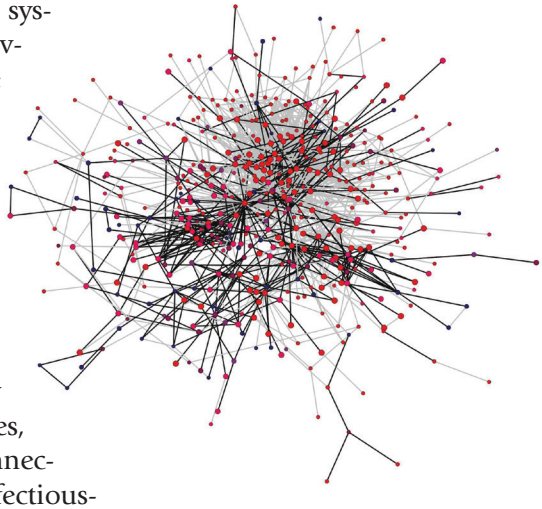
"Addressing Threats and Vulnerabilities in Critical Interconnected Systems: Common Principles in Disease Outbreaks, Internet Malware, and Bank Failures"

Jon M. Kleinberg
Tisch University Professor of Computer Science and Information Science, Cornell University

Thursday 12PM–1:30PM
June 13, 2019

Rayburn House Office Building
Room 2043

A vital feature of many critical systems in society is their connectivity -- they are built from large numbers of components linked together in a network. This structure makes it possible to build them at large scales, but it also puts them at risk of cascading breakdowns, when a problem in one component spreads to others. We consider mathematical models originally developed for epidemic diseases, where a small change in the connectivity of the population or the infectiousness of the disease can lead to large changes in the reach of the outbreak. We then consider how these models apply when developing detection techniques and countermeasures for risks to highly interconnected systems, including malware on the Internet and failures in banking systems.



Please RSVP

By May 31st to amsdc@ams.org

Lunch will be served.
Space is limited at this widely attended public event.

The National Science Foundation (NSF) provides the majority of funding for the basic research necessary to unlock the enormous potential applications of the mathematical sciences. AMS and MSRI appreciate the NSF's far-sighted commitment to this investment.

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Advancing research. Creating connections.

MSRI Mathematical Sciences Research Institute