

IO Seminar – Spring 2016 – 16:15-17:30, 101 Berglas Building

Focus on Network Security

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The seminar in IO will focus on Network Security this Spring. The seminar is ideal for graduate students in Business, Computer Science, Economics, and Engineering.

Key questions include:

- **Why has Internet security worsened even as investment has increased?**
- **According to a report from the US Secret Service, nearly 2/3 of all data breaches could have been prevented using "simple and cheap" countermeasures. Why aren't they deployed?**
- **How much should firms invest to protect their IT systems?**
- **How can the past history of cyber incidents guide future investments in defense?**

With cyber/information security breaches in the news almost every day, the question of optimal cybersecurity policy has attracted the attention of academics, corporate decision makers, and nation states.

Over the past few years, researchers have come to realize that the cause of cyber/information security breaches is often not a failure of technology, but rather an absence of appropriate incentives.

Economics is essential to answering these questions, which seem 'technical' at first glance. But systems often fail because the organizations that defend them do not bear the full costs of failure. This means that incentives are not aligned correctly.

In order to solve the problems of growing vulnerability and increasing crime, solutions must allocate responsibilities and liabilities so that the appropriate organizations to fix problems have an incentive to do so.

This requires both a technical comprehension of security threats combined with an economic perspective to uncover the strategies employed by attackers and defenders.

This insight has led to a proliferation of research on the economics of information security. Security economics is an interdisciplinary field.

