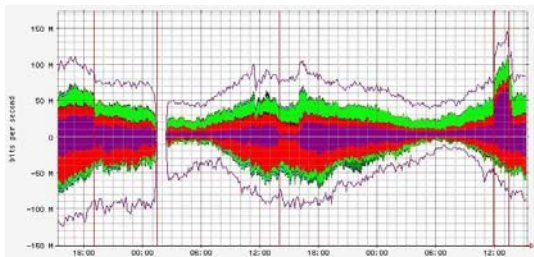


# INSTITUTE FOR PURE AND APPLIED MATHEMATICS

Los Angeles, California

## Applications of Internet MRA to Cyber-Security



● **October 13 – 17, 2008**

**ORGANIZING COMMITTEE:** **BILL AIELLO** (UNIVERSITY OF BRITISH COLUMBIA), **PAUL BARFORD** (UNIVERSITY OF WISCONSIN-MADISON), **TAL MALKIN** (COLUMBIA UNIVERSITY), **NIELS PROVOS** (UNIVERSITY OF MICHIGAN), **MIKE REITER** (UNIVERSITY OF NORTH CAROLINA), **MATTHEW ROUGHAN** (UNIVERSITY OF ADELAIDE)

### Scientific Overview

Internet-security is a large and complex problem space with profound implications for our society. On one side are defenders who are responsible for creating systems, protocols, policies and other mechanisms to protect an IT infrastructure from unwanted access. On the other side are attackers who conduct malicious activity in the Internet for recognition, profit or other more sinister reasons. The purpose of this workshop is to bring together a group of leading researchers and cyber-security professionals to discuss several key challenges for defenders, and how a multi-scale approach might shine new light on these thorny issues. In particular, the two primary themes for workshop will be accurate identification and filtering of malicious traffic and protocols and methods for IT security.

### Confirmed Speakers

**Paul Barford** (Univ of Wisconsin); **Marc Dacier** (Institut Eurécom); **David Dagon** (Georgia Institute of Technology); **Rachna Dhamija** (Harvard); **Sven Dietrich** (Stevens Institute of Technology); **Kevin Fu** (Univ of Massachusetts); **Vinod Ganapathy** (Rutgers University); **Trent Jaeger** (Penn State University); **Wenke Lee** (Georgia Institute of Technology); **Morley Mao** (Univ of Michigan); **Athina Markopoulou** (University of California, Irvine); **Patrick McDaniel** (Penn State Univ); **John McHugh** (Dalhousie University); **Jelena Mirkovic** (UCLA); **Cristina Nita-Rotaru** (Purdue); **Andy Ogielski** (Renesys Corporation); **Stefan Savage** (UCSD); **Vitaly Shmatikov** (Univ of Texas); **Darryl Veitch** (University of Melbourne); **Brian Witten** (Symantec Corporation); **Xiaowei Yang** (University of California, Irvine)

### Long Program Schedule

This workshop is part of the long program Internet Multi-Resolution Analysis: Foundations, Applications and Practice

- Tutorials, September 9 – 12, 2008
- Workshop 1: Multiscale Representation, Analysis and Modeling of Internet Data and Measurements, September 22 – 26, 2008
- **Workshop 2: Applications of Internet MRA to Cyber-Security, October 13 – 17, 2008**
- Workshop 3: Beyond Internet MRA: Networks of Networks, November 3 – 7, 2008
- Workshop 4: New Mathematical Frontiers in Network Multi-Resolution Analysis, November 17 – 21, 2008

### Participation

Additional information about this workshop including links to register and to apply for funding, can be found on the webpage listed below. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission, and we welcome their applications.

**[www.ipam.ucla.edu/programs/mraws2](http://www.ipam.ucla.edu/programs/mraws2)**



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*IPAM is an NSF funded institute*

