



Save the Date

RECONNECT Workshop 2016 Mathematical and Computational tools for Cyber Security

Where: West Point, US Military Academy

When: June 12 - 18, 2016

About Reconnect:

The CCICADA Summer Reconnect Workshops expose faculty teaching undergraduates to the role of the mathematical and computer sciences in homeland security and provide an opportunity to researchers in government or industry to learn about new research in various areas. Topics are presented in a week-long series of lectures and activities; participants are involved in both research activities and in writing materials that can be used in the classroom or to share with their colleagues. Participants may develop materials for publication in the CCICADA Research Reports.

Topic: Mathematical and Computational Tools for Cyber Security

Day 1 will feature *Historical Encryption* (Caesar to early 1900s) and *Encryption Analysis* (how to attack ciphers mathematically) to start the program. As part of encryption analysis, we will discuss the history of the Enigma Machine and bring a real German Enigma machine out of the vault at West Point for participants to see and touch. *Unsolved Ciphers* in Day 1 will wet participants' appetites about ciphers that are still unsolved, leading to possible projects/lessons. Day 2 will feature the *Intersection of Game Theory and Cyber*, while Day 3 will focus on *Machine Learning and Behavioral Characterizations*. The final day of presentations will focus on *Policy and Regulations in the Cyber Domain* and will feature presentations from the FBI and other agencies.

Organizers: Dr. Margaret (Midge) Cozzens, Research Professor at DIMACS Rutgers University
Natalie E Vanatta, MAJ US Military Academy

Keynote Speaker: TBD

Speakers: Natalie Vanatta, MAJ US Military Academy
Milind Tambe, University of Southern California

Registration fees, lodging, meals and travel: *Academic participants from US institutions:* registration, lodging in single rooms and meals will be provided through DHS funding. *Academic participants from non-US institutions:* \$350. *Government participants:* \$350. *For-Profit Corporation participants:* \$500 (includes all meals from Sunday dinner to Saturday lunch). Limited funds are expected to be available to provide partial support for travel.

Deadline for Applications is March 15, 2016 or until all slots are filled. Applications will be submitted online found on the Reconnect on the CCICADA.org web page under education/Reconnect 2016, and will be reviewed as they are received.

Presented under the auspices of CCICADA (<http://www.cccicada.org/>) and the DIMACS Special Focus on Cybersecurity (http://dimacs.rutgers.edu/SpecialYears/2011_Cyber/).

For more information: Christine Spassione (spassion@dimacs.rutgers.edu) or Midge Cozzens (midge6930@comcast.net) or visit the Reconnect web page <http://www.cccicada.org/2016/01/21/2016-reconnect-workshop-june-12-18-2016/>.