INSTITUTE FOR PURE AND APPLIED MATHEMATICS

WOMEN IN MATHEMATICS AND PUBLIC POLICY

January 22 - 25, 2019 | Los Angeles, CA

ORGANIZERS

Erin Hartman (UCLA), **Mary Lee** (The RAND Corporation), **Aisha Najera Chesler** (The RAND Corporation), and **Lynn Vavreck** (UCLA).

PARTICIPATION

Participation in this workshop is by application only. We encourage applications from researchers who wish to participate in this collaborative format, especially graduate students and recent PhDs. Due to the nature of this program, all participants are expected to attend the entire workshop (four days), and only women will be invited to participate. Successful applicants will pay a modest fee when they are invited to register for the workshop. Please apply to the program through Mathprograms.org. The application deadline is 9:00 pm Pacific Time on **November 18, 2018.** We encourage students and recent PhDs to supply two letters of recommendation.

FOR MORE INFORMATION:

www.ipam.ucla.edu/wpol2019

SCIENTIFIC OVERVIEW

The Women in Math and Public Policy workshop is designed to bring together women in mathematics, science, engineering, and policy to work on pressing research topics in the fields of cybersecurity and climate change. These two topics were chosen because of their wide-reaching policy impacts and reliance on various mathematical techniques. The goal is to have a diverse and multidisciplinary cohort of women at different stages in their careers, from graduate students to senior researchers. In addition to working in small groups on a specific research project, there will also be opportunities for networking and to attend talks by keynote speakers.

While participation in the group projects is by invitation only, the keynote lectures by Lucy Jones (Caltech) and Kristin Lauter (Microsoft Research) will be open to the public. Please consult the program webpage for detailed information.

This workshop is organized by the RAND Corporation, a non-profit, nonpartisan public policy think tank, and UCLA's Institute for Pure and Applied Mathematics.

WORKING GROUP PROJECTS

The projects for cybersecurity include:

- **Differential Privacy for Graph Algorithms**
  (Dana Dachman-Soled, University of Maryland)
- **Modeling Risk Triage in a Cyber-Compromised World**
  (Emily Frye, The MITRE Corporation)
- **Targeted mobile digital forensics and privacy**
  (Hongmei Chi, Florida A&M University)

The projects for climate change include:

- **Exploring Climate Data to Understand Changing Weather Extremes**
  (Sarah Kapnick, National Oceanographic and Atmospheric Administration)
- **Downscaling Climate Projections with Advanced Statistical Methods for Policy Decisions** (Cecilia Bitz, University of Washington)
- **Decadal Prediction of the Climate and the Ocean: Advancing Understanding and Techniques** (LuAnne Thompson, University of Washington)
- **Estimating the spatial extent of groundwater contamination in vulnerable communities in Los Angeles County**
  (Michelle Miro, The RAND Corporation)

NSF UCLA ipam