

Message from the General Chair

Welcome to the 2017 Workshop on Learning from Authoritative Security Experiment Results (LASER).

Each year, LASER focuses on an aspect of experimentation in cyber security. The 2017 workshop focus was on improving the rigor and quality of security experimentation through experimental methods and research that exemplifies sound scientific practice.

The event was structured as a workshop with invited talks and a variety of guided group discussions in order to best meet the overall workshop goals.

LASER 2017 sought research papers exemplifying the practice of science in cyber security, whether the results were positive or negative. Papers documenting experiments with a well-reasoned hypothesis, a rigorous experimental methodology for testing that hypothesis, and results that proved, disproved, or failed to prove the hypothesis were sought.

This year, many of the papers and talks for the 2017 LASER Workshop included aspects of measurement and analysis of experimental approaches. This theme was highlighted in the invited talk “The Advancement of Science in Cyber Security” by Dr. Laurie Williams from North Carolina State University, who gave a report on the NSA Lablet program efforts designed to more aggressively advance the science of cyber security. A key motivation of this work is to catalyze a shift in relevant areas towards a more organized and cohesive scientific community for a science of cyber security.

Invited speaker Dr. Josiah Dykstra’s talk “She Blinded Me with Science: Understanding Misleading, Manipulative, and Deceptive Cybersecurity” described how people are often misled, manipulated, or deceived by real and bogus science, wild claims, and marketing trickery. Dykstra’s work explores the dangers of vendor-sponsored studies, surveys, and spurious (false) correlations. Drawing on his book *Essential Cybersecurity Science*, Dykstra discussed how researchers can improve communication with security practitioners and the dangers of manipulative graphics and visualizations that work through mental shortcomings and perception or because of the data they omit.

The workshop received 15 submissions, which were each reviewed by at least 3 members of the Program Committee. The Program Committee accepted 8 full papers, which they believed embodied the workshop spirit and focus of LASER 2017.

This year, the LASER Workshop returned to its roots and was held in October and was hosted by SRI International at their Arlington, VA facility.

LASER recognizes that the future of cyber security lies with the next generation of researchers. As such, LASER sponsors students who are working to become researchers to attend and participate in the workshop. In 2017, four students received full sponsorship.

On behalf of LASER 2017, I wish to thank the many people who made this workshop possible:

- Our program chairs, who worked diligently to put together a strong technical program that would benefit the community
- The authors, who submitted papers to this workshop
- The members of the Program Committee, who carefully reviewed the submissions and participated in paper discussions
- Our organizing committee, who provided guidance and donated their time to handle everything from publicity to logistics
- The National Science Foundation, ACSA, SRI and USENIX , who provided the funding and facilities necessary to make the workshop a reality
- The attendees, without whom there would be no workshop at all. We look forward to meeting everyone at LASER 2018!

Terry Benzel, *USC Information Sciences Institute*
LASER 2017 General Chair