

Program in Brief

The preliminary program appears below. We welcome technical papers discussing methods or applications with a *potential* tie to defense and security issues. More details on the conference will be available. Check <http://www.armyconference.org> for official updates.

- **Welcome:**

- Kathy Ensor, Chair, Statistics Department
- Sallie Keller-McNulty, Dean of Engineering

- **Short Course:**

A short course on "An Introduction to Network Analysis," offered by Stan Wasserman and Ann McCranie of Indiana University will precede the conference on 15-16 October.

- **Invited Speakers:**

- Ron Fricker (Naval Postgraduate School)
Title: Statistical Methods for Electronic Biosurveillance
- Karen Kafadar (Indiana University Bloomington) & Cliff Spiegelman (Texas A&M)
Title: A Deeper Look into the Use of CBLA in Criminal Cases
- Bruce West (Army Research Office)
Title: The Complexity Matching Effect
- Mike Trosset (Indiana University)
Title: What is Manifold Learning?
- Thomas Mathew (University of Maryland)
Title: Generalized Confidence Intervals for Some Bivariate Normal Problems
- Amarjit Budhiraja (University of North Carolina)
Title: Heavy Traffic Analysis of Controlled Queuing Networks

- **Thursday Luncheon Speaker:**

- Kathy Ensor (Rice University)
Title: Statistics, Rice & the DoD

- **Wednesday Banquet Speaker:**

- David (Chris) Arney, U.S. Army Research Laboratory
Title: People of Army Statistics: Stories and Surprises

- **Special Sessions:**

- Event Pattern Recognition for Counter-Terrorism
Organizer: Mouhsiong (Harry) Chang (Army Research Office)
Paul Cohen and Aram Galstyan (USC Information Sciences Institute and CRUE)
Title: Probabilistic Framework for Detecting and Tracking Hostile Intentions in the Hats World
- B. Rozovskii (Brown)
Title: Nonlinear Filters: New Approaches
- Alexander Tartakovsky (University of Southern California)

Title: Decentralized Quickest Change Detection in Distributed Sensor Systems with Applications to Information Assurance and Counter Terrorism

- Methods for the Analysis of Streaming Data
 - Organizer: Bill Szewczyk (National Security Agency)
 - Arnaldo Horta and Joseph McCloskey (National Security Agency)
 - Title: Histogramming in the Streaming Environment
 - Olivier Verscheure and Deepak Turaga (IBM Thomas J. Watson Research Center)
 - Title: Unavailable
 - David Scott (Rice University)
 - Title: Smoothed Histograms on Irregular Meshes with Streaming Data
- Statistics in Biodefense
 - Organizer: Marek Kimmel (Rice University)
 - James R. Thompson (Rice University)
 - Title: Primum Non Nocere
 - James Briggs (University of Houston)
 - Title: Computational Modeling of a Botulinum Neurotoxin: Biowarfare Defense
 - Viacheslav Fofanov (Rice University)
 - Title: Statistical Models for Protein Structural Alignment: Applications in Drug Design and Biodefense

- **Contributed Speakers:**

- JFIT: A Fitting Tool for Johnson Probability Density Function Fitting to Data
Allan T. Mense & Jerry Alderman, Raytheon Missile Systems
- Neonatal Mortality as Function of Secular Events: Flaws and Dangers of Present Methods of Statistical Analysis
Barbara P. Billauer, University of Maryland
- Simple Robust Strategies for Portfolio Design
L. Scott Baggett & James R. Thompson, Rice University
- Optimal Delayed Control of Stochastic Systems
Mou-Hsiung (Harry) Chang, Army Research Office
- Anti-American Attitudes in the Islamic World: An Analysis Using CART Models
Giacomo Chiozza, University of California, Berkeley
- A Large Sample Confidence Interval for Variance
Douglas H. Frank, Indiana University of Pennsylvania
- Lloyd Failure Discounting and "Magical" Reliability Growth Models
Arthur Fries, Institute for Defense Analyses
- A Multinomial-Dirichlet Model for Analysis of Competing Hypotheses
Kristin A. Duncan & Jonathan Wilson, San Diego State University
- Determining Failure Probabilities by Density Estimation of a One Parameter Exponential Model
LCDR Kyle A Caudle, United States Naval Academy
- The Search for Spatial and Spatio-Temporal Anomalies
Michael D. Porter, North Carolina State University
- On the Optimal Allocation of Components within Coherent Systems
Francisco J. Samaniego, University of California, Davis
- Reliability Projections for a Stockpile with Potential to Degrade
Scott Vander Wiel, Los Alamos National Laboratory
Todd Graves, Los Alamos National Laboratory

- Shane Reese, Brigham young University
- Alyson Wilson, Los Alamos National Laboratory
- Semiparametric Sequential Optimal Designs for Generalized Linear Models
Joseph D. Warfield, University of Maryland Baltimore County & Johns Hopkins Applied Physics Laboratory
Anindya Roy, University of Maryland Baltimore County
- Performance Prediction Combining Environmental and Cultural Factors: Grid-Group Cma
Katie Grantham Lough, 21st Century Systems and University of Missouri-Rolla
Warren Noll, 21st Century Systems
Robert Woodley, 21st Century Systems
Dan Krus, University of Missouri-Rolla
- Shoulder Dislocation in Active Duty U.S. Military Personnel
LTC Robert E. Burks, MAJ Krista Watts & LTC Rodney X. Sturdivant, United States Military Academy
- Studies in Military Medicine from the Center for Data Analysis and Statistics (CDAS) at West Point
LTC Rodney X. Sturdivant & MAJ Krista Watts, United States Military Academy
- Use of a Lumbar Support in Relieving and Preventing Lower Back Pain in Helicopter Crews
MAJ Krista Watts, LTC Rodney X. Sturdivant, United States Military Academy
LTC Nicholas Piantanida, M.D., Army Medical Department, West Point
CDT Geoffrey Phillips, United States Corps of Cadets, United States Military Academy
- Regression and Variable Selection in Large p, Small n Problems
Wei-Yin Loh, University of Wisconsin, Madison
- Variability Analysis for Design of Complex Systems
William Thomas, Raytheon Missile Systems
- Assessment of Risk Associated with Safe Operations of Unmanned Ground Systems
Barry A. Bodt, U.S. Army Research Laboratory
- A Useful Combinatorial Identity
Bernard Harris, University of Wisconsin
- **Events:**
 - Social: Tuesday, October 16, 6:30 PM. Open Bar [hosted by the Statistics Department, Rice University], Duncan Hall (Martel Hall/Lobby)
 - Wilks Award Banquet: Wednesday, October 17 6:30 PM, Duncan Hall (Martel Hall/Lobby)
 - Luncheon: Thursday, October 18, Herzstein Hall