Summer School in Statistics for Astronomers and Physicists II

Penn State’s University Park campus • State College, Pennsylvania, USA
June 6–10, 2006

The five-day course “Statistical Inference for Astronomers” is designed to provide graduate students and young researchers with a strong conceptual foundation in modern statistics and to help them develop a repertoire of well-established techniques applicable to observational astronomy and physics. **Topics include** exploratory data analysis, hypothesis testing and parameter estimation, confidence interval estimation, maximum likelihood methods and Bayes’ Theorem, Monte Carlo methods, multivariate methods, nonparametric methods, and Poisson processes. Classroom instruction will be interspersed with hands-on analysis of astronomical data, using public domain software. Morning lectures will be augmented by afternoon practicum sessions using the R package.

Statistical Challenges in Modern Astronomy IV Conference

June 12–15, 2006

The SCMA conferences, held every five years since 1991, are the premier cross-disciplinary gatherings of statisticians and astronomers to discuss methodological issues arising in astronomical research. The sessions for the **SCMA IV conference** will cover: cosmology (including the cosmic microwave background, galaxy clustering, and gravitational lensing), planetary systems, large survey projects and megadatasets, time series analysis, small-N problems in physics and astronomy, recent developments in statistics, and cross-disciplinary perspectives. **Preconference:** The conference will be preceded by a practicum session on June 11 that will include training in the R and Python statistical packages.

Speakers will include:

**Statisticians**—Adrian Baddeley (UWA/CSIRO), James Berger (Duke), Merlise Clyde (Duke), Christopher Genovese (Carnegie Mellon), John Rice (Berkeley), Michael Woodroofe (Michigan)

**Astronomers and Physicists**—Timothy Axelrod (Arizona), Alanna Connors (Eureka Scientific), Glen Cowan (Royal Holloway, University of London), Eric Ford (Berkeley), Krzysztof Gorski (Jet Propulsion Laboratory), Chris Koen (SAfrica AO), Ofer Lahav (University College London), Thomas Loredo (Cornell), Robert Lupton (Princeton), Louis Lyons (Oxford), Vicent Martínez (Valencia), Harrison Prosper (Florida State), Alexandre Refregier (CEA/Saclay), William Romanishin (Oklahoma), Istvan Szapudi (Hawaii), Rebecca Willett (Duke), Graham Woan (Glasgow)

**Funding for Young Researchers**—Some funds are available to support registration and partial travel costs of graduate students and young researchers of U.S. institutions to the SCMA IV research conference.

For more information and to register, visit: [http://astrostatistics.psu.edu/scma4](http://astrostatistics.psu.edu/scma4)

Or contact:
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