CBMS-NSF Regional Research Conference

Model Uncertainty and Multiplicity

University of California, Santa Cruz – July 23-27, 2012.

James O. Berger
Duke University

Dr. Berger is the The Arts and Sciences Professor of Statistics at the Department of Statistics and Decision Sciences at Duke University. Prof. Berger is one of the most accomplished and influential contemporary statisticians. His more than 100 articles and his book on statistical decision theory and Bayesian analysis have had a profound influence in a whole generation of statisticians.

Dr. Berger will deliver 10 two-hour lectures. In addition, the conference will feature three invited speakers who will deliver individual lectures on topics complementary to those discussed by Dr. Berger.

Additional Invited Lecturers:

• Bradley Efron (Stanford University).
• Susie Bayarri (Universitat de València).
• Marc Suchard (University of California, Los Angeles).
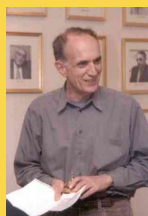
Topics covered:
• Essentials of Bayesian hypothesis testing.
• Conditional frequentist testing, invariance and nonparametric testing.
• Objective priors for model comparison.
• Essentials of model uncertainty.
• Model prior probabilities and multiplicity.
• Model criticism.
• Asymptotics of Bayesian procedures and approximations.

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