

## NIST STATISTICAL ENGINEERING DIVISION SYMPOSIUM

### MONTE CARLO METHODS AND NIST WEB HANDBOOKS

APRIL 4, 2001, 8:30 AM – 2:30 PM

ADMINISTRATION BUILDING, LECTURE ROOM B

As part of the NIST project to update the *Handbook of Mathematical Functions* by Abramovitz and Stegun and to make it available electronically as the *Digital Library of Mathematical Functions*, conferences are being held at NIST for some of the principal topics. On April 4, the Mathematical and Computational Sciences Division and the Statistical Engineering Division are sponsoring a symposium on Gibbs, MCMC and Importance Sampling. The symposium will cover Monte Carlo computing of the probability distributions needed for statistical intervals and other forms of statistical inference. Determination of the numerical accuracy of Monte Carlo results is more nearly statistical analysis than numerical analysis. Thus, inclusion of Monte Carlo methods in the *Digital Library* is a major innovation. A demonstration of the *NIST/SEMATECH Engineering Statistics Internet Handbook* will also be given. Please contact Stephany Bailey at 301-975-2839 or [stephany.bailey@nist.gov](mailto:stephany.bailey@nist.gov) for additional information.

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| 8:30 am  | “The Handbook of Mathematical Functions Goes Digital”<br>Dan Lozier–Mathematical and Computational Sciences Division, NIST |
| 8:45 am  | “Statistics in the Digital Library”<br>Ingram Olkin–Stanford University, David Kemp–St. Andrews University                 |
| 9:00 am  | “Gibbs, MCMC, Importance Sampling”<br>George Casella–University of Florida   |
| 10:00 am | “Monte Carlo Sampling – Real Application”<br>Jun Liu–Harvard University  |
| 11:00 am | Break  |
| 11:30 am | “NIST-SEMATECH Engineering Statistics Handbook”<br>Will Guthrie, Alan Heckert–Statistical Engineering Division, NIST       |
| 12:30 pm | Lunch  |
| 1:30 pm  | SYMPOSIUM ROUNDTABLE   |
| 2:30 pm  | Adjourn  |

NIST can be reached from the Shady Grove Metro stop on the Red Line by taking the [NIST shuttle](#). Lunch will be available at the NIST cafeteria.