

samsi

NSF ● Duke ● NCSU ● UNC ● NISS

SAMSI Programs for 2002-03

- Inverse Problems
 - Kickoff Workshop: September 21-24
 - Final Workshop: May 14-16
- Stochastic Computation
 - Kickoff Workshop: September 25 – October 2
 - Final Workshop: June 26-28
- Environmental Modeling
 - Multiscale Workshop: February 2-7
 - Simulation/Optimization Workshop: April 28-30
 - Spatial-Temporal Statistics Workshop at NCAR: June 1-6

SAMSI Programs for 2003-04

- **Internet Traffic** (Fall, 2003)
 - Workshop on measurement, modeling, heavy traffic: 9/17-9/20, 2003
 - Internet tomography workshop: 10/12-10/14, 2003
- **Data Mining and Machine Learning** (Entire year)
 - Tutorials and opening workshop: 9/6-9/10, 2003
 - Closing workshop: 5/20-5/22, 2004
 - *possible foci include*
 - Sampling, model selection and search, robustness and data quality;
 - Inference for high-dimensional, small sample ("large d , small n ") data;
 - Scalability and other computational issues;
 - Novel, complex forms of data, such as images and space-time data.
- **Multiscale Modeling and Control Design** (Spring, 2004)
 - Opening workshop: 1/17-1/21, 2004
 - Soft-matter and nano-materials workshop: 2/15-2/17, 2004
 - Granular flow workshop: 4/15- 4/17, 2004

SAMSI Programs for 2004-2005

- **Social Sciences:** *possible emphases include*
 - Social networks
 - Genetic and environmental influences on behavior
- **Gene Regulation:** *possible emphases include*
 - Dynamical modeling, involving stochasticity
 - Inference about the network structure
- **Data Assimilation or Random Matrices**

Opportunities for Participation

- Proposing and leading a research program
- Visiting researchers (short and long term)
- Workshop participation
- Testbed problems and Data
- Postdoctoral opportunities (2+ years)
- SAMSI University Fellows
- Graduate students
 - participate in major research programs
 - summer interdisciplinary workshops

Industrial Statistical/Mathematical Modeling Workshop

- July 21-30, 2003 at North Carolina State University
- A 10 day workshop that emphasizes
 - the team approach to multidisciplinary projects
 - the SAMSI philosophy of requiring significant statistical and mathematical components
- Problems and data by invited presenters (scientists) from 6 industrial and government laboratory groups
- 36-42 graduate students selected from a national pool, and divided into 6 teams
- Led by the presenting scientists, with SAMSI faculty mentors, postdocs, and grad students (math and stat)