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NISS/SAMSI Affiliate Update

August 2013

Workshop on Spatial Methods for Federal Surveys

The National Institute of Statistical Sciences (NISS) sponsors periodic workshops for the benefit of the NISS Affiliates. Workshop attendance is restricted to representatives of NISS Affiliate organizations and a limited number of other invited participants.

The next Affiliate workshop is the NISS Affiliate Workshop on Geospatial Methods for Federal Surveys, to be held at the Bureau of Labor Statistics Conference Center, 2 Massachusetts Ave. NE, Washington, DC, on **September 16-17, 2013**.

Geospatial methods are proven tools for studies involving agriculture, environment and natural resources, but have yet to establish a foothold in socio-economic studies and surveys conducted by Federal statistical agencies. The purpose of the Workshop is to examine successful applications of geospatial methods in several domains, and investigate if and how these methods might be applied in socio-economic settings. Presentations will cover topics including improving the precision of small area estimates, combining survey data in space and time, spatially enhanced survey sampling, and applications of GIS and Google Earth to survey design and data collection.

Montserrat Fuentes (NCSU) will lead a half-day discussion focused on moving beyond what has been learned at the Workshop. The Workshop Organizer is Larry Cox, NISS Assistant Director for Official Statistics (cox@niss.org).

NISS/SAMSI JSM Events

NISS/SAMSI Affiliates Meeting
When: August 4, 2013 5:30 p.m.
Where: Saint-Jaques Intercontinental Hotel, Montreal, Canada
Details here.

NISS/SAMSI Reception
When: August 5, 2013 5:00 p.m.
Where: Room CC 710a, Palais des congrès de Montréal, Montreal, Canada
Details here.

SAMSI Events

Modern Math Workshop 2013
When: October 1-2, 2013

Featured Affiliate - University of Michigan, Departments of Statistics and Biostatistics

Established in August 1949 as the Department of Public Health Statistics, then in 1960 as the Department of Biostatistics, the Department of Biostatistics at the University of Michigan offers graduate programs in Biostatistics and conducts biostatistical and collaborative research in health-related areas. Faculty and students work on critical new areas of biostatistics methodological research, including image analysis, survival and event history analysis, statistical genetics and bioinformatics, clinical trials, Bayesian methods, statistical computing, longitudinal data analysis, methods for missing data, and survey research. See http://www.sph.umich.edu/biostat/.

The Department works in close collaboration with faculty in the school of public health, medicine, nursing, dentistry and the institute for social research among others. Methodological and collaborative research is well funded through grants from the National Institute of Health and other government and private agencies.

For more information, **click here**.

Where: San Antonio, TX

As part of the *Mathematical Sciences Collaborative Diversity Initiatives*, nine mathematics institutes (including SAMSI) are pleased to host their annual pre-SACNAS National Conference event, the **2013 Modern Math Workshop**.

For futher information and to apply please go to http://icerm.brown.edu/mmw2013 .

Dynamics of Seismicity, Earthquake Clustering and Patterns in Fault Networks
When: October 9-11, 2013
Where: Research Triangle Park, NC
Deadline to Apply: September 6, 2013
The workshop will highlight the key role of the mathematical sciences in studying seismicity dynamics in relation to properties of faults and the crust as an essential component of this interdisciplinary research endeavor. This is also an official activity as part of the 2013 Program of Mathematics and the Planet Earth.
Details here.

CMSS: Social Network Data: Collection and Analysis
When: October 21-23, 2013
Where: Research Triangle Park, NC
Deadline to Apply: September 13, 2013
This workshop will directly interface with the Computational Methods in Social Science program year by focusing on pressing issues in the systematic collection, statistical analysis, and mathematical modeling of social science network data.
Details here.

Education and Outreach
Undergraduate Workshop
When: October 24-25, 2013
Where: Research Triangle Park, NC
Deadline to Apply: September 20, 2013
SAMSI will offer a two-day undergraduate workshop on topics of current interest in statistics and applied mathematics, mainly focusing on the Computational Methods in Social Sciences topic.
Details here.

LDHD: Topological Data Analysis
When: February 3-7, 2014
Where: Research Triangle Park, NC
Details here.

Education and Outreach
Undergraduate Workshop
When: February 20-21, 2014
Where: Research Triangle Park, NC
Deadine to Apply: January 17, 2014
Details here.

LDHD: Statistical Inference in Sparse High-Dimensional Models: Theoretical and Computational Challenges
When: February 24-26, 2014
Where: Research Triangle Park, NC
Details here.

LDHD: SAMSI-CRM Workshop on Geometric Aspects of High-dimensional Inference
When: March 31-April 2, 2014
Where: Research Triangle Park, NC

The workshop is a joint venture between SAMSI and Centre de Recerca Matemàtica (CRM) in Barcelona, Spain.

Topics covered by the workshop may include some of the following:

- low rank matrix estimation;
- sparse recovery and compressed sensing;
- covariance estimation for high-dimensional data;
- model selection and oracle inequalities in high-dimensional statistics;
- statistical inference for log-concave distributions in high dimensions;
- non-asymptotic theory of random matrices;
- concentration inequalities, generic chaining, and empirical processes methods in high-dimensional statistics;
- hypotheses testing for high-dimensional objects.

[Details here](#).

Spring Opportunities for Women
When: April 9-11, 2014
Where: Knoxville, TN
[Details here](#).

NISS and SAMSI
P.O. Box 14006, Research Triangle Park, NC
www.niss.org and www.samsi.info