The University of Georgia
Department of Statistics
Presents the

UGA/Clemson Joint Seminar

Tailen Hsing
Department of Statistics
University of Michigan

"Nonparametric Estimation of the Variogram and its Spectrum"

In the study of intrinsically stationary spatial processes, a new nonparametric variogram estimator is proposed through its spectral representation. The methodology is based on estimation of the variogram's spectrum, here for the isotropic case, which is formulated in terms of solving a regularized inverse problem. We use quadratic programming to obtain the solution. The estimated variogram is guaranteed to be conditionally negative-definite, a key property of variograms. Simulation shows that our estimator is flexible and generally has smaller mean integrated squared error than the parametric estimator under model misspecification.

For more information,
please contact:
stat@uga.edu

Parking is available at the UGA
Botanical Gardens. Please see the
Botanical Gardens website
(http://botgarden.uga.edu/
faccallaway.html) for details.

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Thursday, March 29, 2012

UGA Botanical Gardens

Callaway Building

4:00 pm — Joint seminar in the Callaway Building auditorium

6:00 pm — Catered buffet dinner in the Callaway Building reception area. Please RSVP for dinner to stat@uga.edu. $10/person.