

DEPARTMENT OF MATHEMATICS AND STATISTICS
MISSISSIPPI STATE UNIVERSITY

COLLOQUIUM

Nonparametric Estimation of Variogram and its Spectrum

CHUNFENG HUANG

Department of Statistics

Indiana University

Friday, November 14 at 2:30 pm

Allen 14

Abstract. In the study of isotropic intrinsically stationary spatial processes, a new non-parametric variogram estimator is proposed through its spectral representation. The spectrum estimation is formulated in terms of solving a regularized inverse problem. A numerical implementation is presented through quadratic programming. We demonstrate our method in a simulation study and a dataset of temperature changes over America.

There will be a reception for Dr. Huang in Allen 467 at 3:30 pm.

Contact Haimeng Zhang, hzhang@math.msstate.edu or (662) 325-7151, for additional information.