## 1146-60-129

Yunzhu He and Dongsheng Wu<sup>\*</sup> (dw0001@uah.edu), Department of Mathematical Sciences, University of Alabama in Huntsville, 301 Sparkman Drive, Huntsville, AL 35899. *Wavelet* estimators of multivariable nonparametric regression functions with long memory data.

In this talk, we propose wavelet estimators for multivariable nonparametric regression functions with long memory data and investigate the asymptotic rates of convergence of wavelet estimators based on level dependent thresholding. We further provide an asymptotic expansion for the mean integrated squared error (MISE) of the estimators. These results extend the corresponding univariate results in the literature to the multivariate setting. (Received January 14, 2019)