**THE UNIVERSITY OF ALABAMA IN HUNTSVILLE**

**MATHEMATICAL SCIENCES COLLOQUIUM**

**Dr. Dongsheng Wu**

The Department of Mathematical Sciences

The University of Alabama in Huntsville

**Packing Dimension Results of the Images of Gaussian Random Fields**

 **DATE: Friday, September 18, 2015**

 **TIME: 3:00 p.m. – 4:00 p.m.**

 **PLACE: Shelby Center 219**

In this talk, we extend the original notion of packing dimension profile due to Falconer and Howroyd (1997) to metric spaces. Then we use the new notion to derive some of the packing dimension results of the images of Gaussian random fields, including fractional Brownian motion, fractional Brownian sheets and solution processes of certain stochastic partial differential equations. We believe that the extended notions of packing dimension profile are of independent interest. This talk is based on joint works with Y. Du, A. Estrade. J. Miao and Y. Xiao.

**Refreshments will be served at 2:30 p.m. in SC 201 suite landing.**