**THE UNIVERSITY OF ALABAMA IN HUNTSVILLE**

**MATHEMATICAL SCIENCES COLLOQUIUM**

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The Department of Mathematical Sciences

The University of Alabama in Huntsville

Moderate Deviation Principle and Central Limit Theorem for a Class of SPDEs

**DATE: Friday, September 19, 2014**

**TIME: 3:00 p.m. – 4:00 p.m.**

**PLACE: Shelby Center 218**

A class of Stochastic Partial Differential Equations (SPDEs) with non-Lipschitz continuous coefficient of the form,

(y) = F(y) +

with conditions,

is introduced, where

ℝ and 0 Moderate Deviation Principle and Central Limit Theorem are derived for this class, and as applications, these theories are achieved for two commonly studied population models: super-Brownian motion and Fleming-Viot Process.

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