

## **"Simulation-Based Bayesian Estimation of Quadratic Term Structure Models"**

Pangding Zhu  
Department of Statistics, The University of Chicago

FRIDAY, February 25 , 2:00 pm  
Eckhart Hall, Room 110, 5734 S. University Avenue

### **ABSTRACT**

This paper presents the application of Bayesian simulation-based estimation to a class of interest rate models known as quadratic term structure models (QTSM). The technique here is based on hybrid "Metropolis within Gibbs"-sampling and make explicit use of the structure of the underlying economic model when constructing the proposal densities for Metropolis-Hastings algorithm. I present general MCMC algorithms with a state-space representation, and estimate a two-factor QTSM from the monthly yield data of U.S.A treasury bonds, for the period January 1955 to May 2003.

