

# Numerical Approximation of Invariant Measures for SDEs with Regime Switching

**Jianhai BAO** *Central South University, PRC*, E-mail: jianhaibao13@gmail.com  
Jinghai Shao *Beijing Normal University, China*  
Chenggui Yuan *Swansea University, UK*

In this talk, by the Perron-Frobenius theorem and the principal eigenvalue method, we discuss the numerical approximation of invariant measure for a wide class of SDEs with regime switching, and several examples are constructed to demonstrate our theories.