

Department of Applied and Computational Mathematics and Statistics Colloquium

Grzegorz Rempala


Mathematical Biosciences Institute
Ohio State University

will give a lecture entitled:

*Inference for Stochastic Dynamical Systems: Applications to
Epidemic Modeling*

Abstract

Recent global pandemics of H1N1 and SARS have brought the issues of inference for epidemic parameters to the forefront of statistical sciences in the 21 century. The talk will present both some classical and more recent results on the rates inference for the partially observed Markovian epidemic SIR models. In particular it will be shown how the martingale methods may be used to obtain the asymptotic distributions of the parameter estimates like e.g., the estimate of basic reproduction number R_0 . The results will be illustrated with the analysis of the 2009 H1N1 epidemic outbreak on the campus of the Washington State University.



**Friday, March 21, 2014
4:30 p.m. to 5:30 p.m.
127 Hayes-Healy Center**

Colloquium Tea

4:00 p.m. to 4:30 p.m. 154 Hurley Hall