MICHIGAN STATE UNIVERSITY
Department of Statistics and Probability

COLLOQUIUM

Natesh Pillai

Title: Some aspects of Bayesian inference in high dimensional problems

Tuesday, October 28, 2014
10:20 a.m. - 11:10 am
Refreshments 10:00 am
C405 Wells Hall

Abstract

In this talk we explore two instances of high dimensional Bayesian estimation. In the first part, we outline a theory for constructing shrinkage priors in high dimensional problems. These prior distributions are popular because the corresponding MCMC algorithms mix very quickly. However, nothing much is known about their statistical efficiency. We present some results in this direction and also give a new prior which is both statistically and computationally efficient. In the second part, we look at Approximate Bayes Computation (ABC) and see when it is feasible to use this methodology to obtain statistically valid results.

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