RUTGERS UNIVERSITY
DEPARTMENT OF STATISTICS AND BIOSTATISTICS
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Seminar

Speaker: **Professor Kshitij Khare**
          University of Florida

Title: **Improving the Data Augmentation algorithm**

Time: **3:20 – 4:20pm, *Wednesday*, October 23, 2013**

Place: **552 Hill Center**

Abstract

The Data Augmentation algorithm is a very popular tool for sampling from intractable probability densities (including intractable posterior densities in Bayesian applications.) However, the DA algorithm often suffers from slow convergence. The 'sandwich' DA algorithm is an effective tool developed over the past decade to improve the speed of the DA algorithm at negligible computational cost. The first part of the talk will focus on a theoretical comparison of the sandwich algorithm with the DA algorithm, in the traditional 'two-block' DA case. The second part of the talk will focus on the extension of the sandwich algorithm to the 'multi-block' DA case. The methods proposed will be illustrated on the Bayesian lasso algorithm of Park and Casella (2008) and the Bayesian probit regression algorithm of Albert and Chib (1993). This is joint work with Jim Hobert and Subhadip Pal.

*** Refreshments will be served @2:50pm in Room 502 Hill Center ***