The University of Chicago
Department of Statistics

Seminar Series

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The Expected Auxiliary Variable Method
for Monte Carlo Simulation

MONDAY, November 12, 2007 at 4:00 PM
133 Eckhart Hall, 5734 S. University Avenue

Refreshments following the seminar in Eckhart 110.

ABSTRACT

The expected auxiliary variable method is a general framework for Monte Carlo simulation in situations where quantities of interest are untractable and prevent the implementation of classical Importance Sampling and Markov Chain Monte Carlo methods. The method finds application in situations where marginal computations are of interest, transdimensional move design is difficult in model selection setups or when the normalising constant of a particular distribution is unknown but required for exact computations. I will present several examples of applications of this principle as well as some theoretical results that we have recently obtained in some specific scenarios.