Statistical Engineering Division Seminar

Friday April 21, 1995 11:00 am

Lec. Room B
NIST
Gaithersburg, MD

Markov Chain Monte Carlo and the Salesman Problem

Wing H. Wong

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We will present some new results on Monte Carlo simulations and global optimization. We will follow the traditional approach of constructing a Markov Chain with a desired stationary distribution. However, the concepts of weighting and control will be introduced into the Markov framework. We will also discuss the use of "sequential build-up" techniques in Monte Carlo. The new methods will be illustrated using the Traveling Salesman Problem.

Wing H. Wong is currently a Professor of Statistics at the Chinese University of Hong Kong. Formerly, he was a Professor of Statistics at the University of Chicago as well as a visitor to many distinguished institutions. His research interests include asymptotic theory, Bayesian computation, models for image analysis and problems in genetics. He was a Guggenheim Fellow in 1987 and the recipient of the 1993 Committee of the Presidents of Statistical Societies (COPSS) award for outstanding contributions to the profession, and is a fellow of the Institute of the Mathematical Statistics.

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