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INSTITUT SAINS MATEMATIK

UNIVERSITI MALAYA

SIRI KOLOKIUM

Tajuk: Convergence and efficiency of MCMC algorithms

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Masa : 3.00 pm – 4.00 pm

Tempat : MM3, INSTITUT SAINS MATEMATIK

Abstrak

Markov chain Monte Carlo (MCMC) algorithms are widely used in many scientific applications, arising from areas such as statistics, computer science, physics, chemistry and biology. They are designed to simulate Markov chains with prescribed stationary probabilities distributions. This talk will review the principles of several popular algorithms. The convergence of some algorithms, based on a spectral decomposition technique in operator theory, will be discussed. In addition, I will present some results on the well-known optimal scaling problem. These results give some guidelines on how to improve the efficiency of some MCMC algorithms in practice.

SEMUA DIJEMPUT HADIR