

Towards an unbiased and scalable Monte Carlo method for Bayesian inference for big data

By Gareth Roberts

Joint work with Murray Pollock, Paul Fearnhead and Adam Johansen

The talk will introduce a new SMC/MCMC methodology for exploring posterior distributions by using a modification of the exact diffusion simulation methodology developed by the presenter over the last 10 years (primarily in work with Beskos and Papaspiliopoulos as well as the co-authors of this work). The method has remarkably good scalability properties as the size of the data set increases, and therefore is a natural candidate for big data inference.