Statistics and Actuarial Science Seminar

Dr Andy Golightly (Newcastle University)

will speak on

Bayesian inference for partially observed diffusion processes

Thu 8th March 2012 at 3:00PM

Location: Statistics Seminar Room- L550 Library building

We consider Bayesian inference for parameters governing nonlinear multivariate diffusion processes using discretely observed data that may be incomplete and subject to measurement error. The typically unavailable transition density characterising the process is replaced with an Euler-Maruyama approximation and an imputation approach is adopted for inference. We consider the task of constructing an MCMC scheme that is not afflicted by the well known problem of dependence between parameters and augmented data. We apply the method to examples arising from finance and systems biology.

This talk is part of the **Statistics and Actuarial Science** series. For more, see
`https://maths.ucd.ie/seminars`