



Meeting of the RSS Avon Local Group

Direct Bayesian Inference for Generalised Linear Models: Short Course

by
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15 May 2013, 13:15-16:30

University of Bath

Traditionally, Bayesian inference for general models has been based on computationally expensive Monte Carlo simulation. However, for large classes of models this is unnecessary, as they can be written on a form that allows the use of direct optimisation and numerical integration, which can be substantially and fundamentally faster, as well as more accurate. This tutorial will show how this can be applied to a wide class of generalised linear models, via the R-INLA software package (www.r-inla.org).

The tutorial will consist of lectures explaining the fundamentals of Bayesian modelling with LGMs and INLA, and demonstrations of how to estimate models using R-INLA, with examples taken from environmental science, medicine, and epidemiology. Some previous experience with linear models is needed.

Further details can be found at <http://www.bris.ac.uk/cmm/research/rss-group/>

About the instructor: Finn Lindgren's main research interests are computational methods for Bayesian inference, spatial modelling, Gaussian Markov random fields and stochastic partial differential equations, with applications in geostatistics and climate modelling. He is among the developers of the statistical software INLA which aims to perform fast inference on Bayesian hierarchical models. <http://people.bath.ac.uk/fl353/>

The meeting will take place in room 4E 3.38, University of Bath (see <http://www.bath.ac.uk/maps/> for a map).

The meeting is open to all and free of charge. For more information and to register please contact: E.Evangelou@maths.bath.ac.uk