# Bayesian Modelling in R with rjags

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March 31, 2008

JAGS (Just Another Gibbs Sampler) is a portable engine for the BUGS language, which allows the user to build complex Bayesian probability models and generates random samples from the posterior distribution of the model parameters using Markov Chain Monte Carlo (MCMC) simulation.

The **rjags** package currently provides a small library that permits a direct interface from R to the main JAGS library. Future versions of **rjags** should provide additional Bayesian modelling tools. However, there are still outstanding problems, such as the choice of R class for representing MCMC output, that still need to be resolved.

This talk will discuss some of the issues involved in creating a portable interface package for R. I will illustrate the way that R and JAGS can be combined to provide tools for Bayesian modelling, such as the deviance information criterion (DIC) and related penalized loss functions for model comparison.