

Bayesian Statistics with Lee & Wagenmakers

Summary

In this workshop, plenary lectures provide the theoretical background of Bayesian statistics, and practical computer exercises teach you how to use the popular WinBUGS and JAGS programs and apply them to a wide range of different statistical models. After completing this workshop, you will have gained not only a new understanding of statistics, but also the technical skills to implement models that are appropriate for the substantive hypotheses that you seek to test.

Objectives

Our first objective is for you to experience first-hand how a Bayesian approach to data analysis and modeling can improve inference and increase understanding. Our second objective is for you to obtain practical experience with WinBUGS and JAGS, easy-to-use computer programs that allows the user to implement all kinds of models, and perform Bayesian inference on them.

Target audience

This workshop is meant for researchers who want to learn how to apply Bayesian inference in practice. Most applications we discuss are taken from the field of cognitive science. The workshop is based on the book "Bayesian Cognitive Modeling: A practical course" written by Michael Lee and Eric-Jan Wagenmakers. As the workshop covers a variety of topics within cognitive science and exercises of varying difficulty, the course material is appropriate for researchers with a wide range of prior knowledge and interests.

Although some basic knowledge of Bayesian inference is an advantage, this is not a prerequisite. In the course we use WinBUGS and JAGS in combination with R or Matlab (the choice is yours), and therefore some basic knowledge of either R or Matlab is also an advantage.

Dates: Mon 16th – Friday 20th Jun

Places are extremely limited, but please register here:

<https://auws.au.dk/forms/frm1Arrangement.aspx?value=635356652500689140&id=20277>