**Course schedule**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Monday** | **Tuesday** | **Wednesday** | **Thursday** |
| 9:15 - 12:30 | **Introduction & Appetizer (JC,FH)**  **Classical statistics (FH)**  NSHT and MLE | **Markov Chain Monte Carlo methods (FH)** | **Hierarchical Bayesian I (JC)**  Separating process and observation error | **Simulation-based approximations (FH)** |
| Break | Break | Break | Break |
| *Exercise: Likelihood in R* | *Exercise: A basic MCMC sampler* | *Exercises:*  *A hierarchical model in Winbugs* | **Bayesian model selection (JC)** |
|  | Lunch | Lunch | Lunch | Lunch |
|
| 13:30 - 18:00 | **From conditional probabilities to**  **Bayes formula (JC)** | **Introducing OpenBugs (JC)**  Regression | **Hierarchical Bayesian II (JC)**  *Spatial models* |
| Break | Break | Break |
| **Bayesian vs.**  **frequentists (FH)**  **Questions** | *Exercises* | **State-space models (JC)** |
|
| **Prior choice (FH)** | **Question & feedback round** |

**Room information**

**Computers**

We recommend that you bring your own laptop – this has the advantage for you that we can help you with any problems and that you will be able to run Bayesian models on your computer after the course with no additional effort. We assume for the moment that enough people will bring their own laptops so in order to have one computer at least for every second person for the exercises.

We have some time scheduled for checking your setup, but we would like to ask you to try to install the necessary software in advance. Basically, you need a recent R version, OpenBugs and the BRugs R package. Follow the instructions at the link below and let us know if you have any problems with installing the software

<http://theoreticalecology.wordpress.com/setting-up-openbugs-and-r/>