



# Approche Bayésienne de la variabilité



## Présentation

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### Description

1. Bayesian inference: Motivation and simple example.
2. The likelihood.
3. A detour to explore priors.
4. Markov chains Monte Carlo methods (MCMC)
5. Bayesian analyses in R with the Jags software.
6. Contrast scientific hypotheses with model selection (WAIC).
7. Heterogeneity and multilevel models (aka mixed models).

### Objectifs

1. Try and demystify Bayesian statistics, and MCMC methods
2. Make the difference between Bayesian and Frequentist analyses
3. Understand the Methods section of a paper that does Bayesian stuff
4. Run Bayesian analyses with R (in Jags)

### Contrôle des connaissances

Contrôle continu intégral : 100%

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### Informations complémentaires

Volumes horaires\* :

CM : 0 h

TD : 9 h

TP : 6 h

Terrain : 0 h

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SPS : 0 h

Séminaires : 0 h

Hors UM : 0 h

### Infos pratiques

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### Contacts

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