Bayesian statistics

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Exam rules

- You will be assigned one or more **research papers**.

- You must submit to us, at most three days before the exam date, a **8 pages long review paper** about the assigned topic, written in Latex.

- You can use any template you want, but make sure the manuscript is written as if it were to be submitted to a peer-reviewed statistical journal (i.e. *Biometrika*).

- You can decide the content of your manuscript, as long as it is related to the assigned papers. We expect you to **implement** the method /model to some extent, e.g. using **R**.

- Your manuscript will be peer-reviewed and you will receive 1-2 reports.

- Finally, you will present your review paper in a 20 minutes **talk**.

- **Optional**. If you have some novel idea in mind, you can write (a first draft) of a research paper rather than a review.

The keyword system

- The research paper(s) you will be assigned are determined by a list of 3–5 **keywords** you need to send us before the end of the course.

- For instance, a possible list could be something like:
    - `Asymptotic statistics`
    - `Bayesian nonparametrics`
    - `Mixture models`

- In this case, a likely outcome would be the paper:

- Rousseau, J. and Mengersen, K. (2011). Asymptotic behaviour of the posterior distribution in overfitted mixture models. *Journal of the Royal Statistical Society. Series B: Statistical Methodology*, **73**(5), 689–710.