Join Radboud Summer School 2019!

Practical Mixed Effect Regression Modelling for Psychology and Language Science

Radboud University
The course covers mixed effect modelling; a cutting-edge regression method for cognitive and social scientists. In lectures and hands-on tutorials using real data sets, students will run, fit, interpret and visualize models using R.

This course is a practical guide to mixed effect modelling, a cutting-edge regression method important for cognitive and social science. The course is structured as 50% lecture and 50% hands-on practice where students are guided through tutorials in R, a popular open-source programming language and statistical interface. Students will design code and analyses to examine their choice of data (provided by us, or brought to class by the student), with the aim of providing useful, concrete skills that will translate from the classroom to academic or professional expertise. The course covers:

- differences between fixed and random effect models and show how to diagnose what models fit the data the best, pairing this with hands-on tutorials. We discuss why the mixed effect modelling technique is superior to traditional repeated measures ANOVA.
- practicalities about how to analyse different sorts of predictors (contrast coding and transformations) and dependent measures (linear vs generalized mixed effect models).
- experimental power—what it is, new ways of thinking about it, and how to run power analyses using mixed effect models. Calculating statistical power allows scientists to design studies that have the right number of observations to reliably test questions of interest.

After this course you are able to

- Use and implement theory of mixed effect models in R
- Report mixed effect models for publication purposes
- Understand statistical power for effective experimental designs

Number of EC

2 ECTS credits

Course leaders

- Laurel Brehm, Researcher
  Max Planck Institute for Psycholinguistics
- Phillip Alday, Researcher
  Max Planck Institute for Psycholinguistics

Admission document

Motivation letter
**Entry level**
Advanced Bachelor, Master and PhD

**This course is designed for**
Anyone who has a background in psychology and language science, and use repeated-measures designs in empirical research. However, passive knowledge of probability and statistics is required.

**Course date**
Monday 5 August - Friday 9 August 2019

**Course fee**
€ 450

**Deadline application**
1 June 2019

You can find more details about this course on our website

**Discounts**
- 10% discount for early bird applicants. The early bird deadline is 1 March 2019.
- 15% discount for students and PhD candidates from partner universities. Please note that these discounts can be combined if you apply before 1 March 2019.

Apply now!
What is the RSS experience?

RSS is more than just a course!

Radboud Summer School offers you a unique opportunity to meet other students and researchers from all over the world with different cultural and academic backgrounds. You will also get to know Radboud University and the city of Nijmegen. Our social programme includes a welcome reception, guest lecture and farewell drinks. And for a small fee you can join our BBQ, River Cruise on a pancake boat, a Pub Quiz, Sports Activities or a City Game.

Want to know more?
Have a look at what participants have said about their experience on our website!

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