



Workshops - Explanations

Winter / Spring 2011
UKE Campus W 30, Seminar Room

Functional Neuroanatomy Workshops

As the title implies, the functional neuroanatomy of the named topics will be introduced by a researcher in that field. The lecturers have also been asked to provide seminal papers. The aim of the series is to provide basic knowledge in all areas and to know where to look once you forget what was presented.

Graphics Theory / Practice*

Based on the feedback from the last round of workshops, the "A picture is worth a 1000 words" workshop has been split into two sessions. Andreas will go into the details of the "theory" behind pictures, e.g. what exactly is a pixel and how does changing it effect what you see. Niklas will then show the practical side of having this knowledge using gimp. Whatever is shown in gimp is easily transferable to other graphics programs; the decision to use gimp is based on the fact that it is freeware.

Intermediate Matlab*

After a short review of the last workshop, function handling for graphics and how to manipulate parents and children will be covered. The workshop will continue with how to use functions: scripting, sub-functions, multiple input / output variables, function handles and debugging. File handling and regular expressions will also be covered. If time permits, the workshop will end with basic data analysis.

MS-Word 2007 / Zotero

Microsoft Word can actually be useful if you are aware of all the tricks it is now capable of. Zotero is now also at a point where it can compete well with EndNote, and it is free. If you don't feel like writing your thesis in LaTeX and are looking for a quick and easy alternative, Andreas will show you how. [To participate, please bring your own laptop with Word2007 installed.](#)

Introduction to Cognitive Modeling*

This workshop gives a theoretical overview over concepts and implementations of computational models of cognition. We will not focus on particular psychological models but on understanding the general rationale of modeling. In addition, MATLAB exercises are planned with the ultimate purpose that participants learn how to set up and test own models of cognition.

The theoretical part comprises topics such as "from verbal to mathematical models", "model fitting procedures", "model comparison", "cognitive modeling and neuroscience". Exercises will accompany these topics, that is, participants will implement, run, and compare computational models of cognition.

Experience with MATLAB is of advantage but not mandatory.

* There is a limit of 20 participants. Laptops with software will be provided for those who wish. When registering, please indicate if a) you are bringing your own laptop and b) if you will therefore need internet access (MatLab license).