

Short Course on:

Statistical Parametric Mapping for MEG/EEG

(Presented by the Wellcome Trust Centre for Neuroimaging)

May 10 (Mon) - 12 (Wed) 2010

The course will present instruction on the analysis of EEG and MEG data. The first two days will combine theoretical presentations with practical demonstrations of the different data analysis methods implemented in SPM. On the last day participants will have the opportunity to work on SPM tutorial data sets under the supervision of the course faculty. We also invite students to bring their own data for analysis. The course is suitable for both beginners and more advanced users. We advise students to gain at least some minimal familiarity with the methodology, for example, from reading introductory articles available from the SPM web page (<http://www.fil.ion.ucl.ac.uk/spm/doc/intro/>).

Monday May 10th

9.30 - 10.15 What are we measuring with M/EEG?
Jeremie Mattout

10.15 - 11.00 Data pre-processing
Vladimir Litvak

Coffee

11.30 - 12.15 General linear model and classical inference
Christophe Phillips

12.15 - 13.00 Multiple comparisons problem and solutions
Guillaume Flandin

Lunch

14.00 - 14.45 Statistical analysis of M/EEG - practical aspects
Rik Henson

14.45 - 15.30 Fieldtrip, a tool for GUI-less exploration of brain dynamics
Jan-Mathijs Schoffelen

Coffee

16.00 - 17.00 M/EEG pre-processing demo
Vladimir Litvak

17.00– 18.00 Statistical analysis of images demo
James Kilner/Rik Henson

Tuesday May 11th

9.30 - 10.15 Bayesian inference
Jean Daunizeau

10.15 - 10.45 M/EEG inverse problem and solutions
Gareth Barnes

10.45 - 11.15 Imaging source reconstruction in the Bayesian framework
Rik Henson

Coffee

11.45 - 12.15 M/EEG source analysis – demo
Jeremie Mattout/Gareth Barnes

12.15 - 13.00 The principles of DCM
Vladimir Litvak

Lunch

14.00-14.45 DCM for evoked responses
Stefan Kiebel

14.45 - 15.30 DCM for steady state responses
Rosalyn Moran

15.30 - 16.15 DCM for time-frequency
Will Penny

Coffee

16.45 - 17.30 DCM demo
Marta Garrido

17.30 Clinic
Karl Friston

Wednesday May 12th

9.30 – 17.00

Practical hands-on session in UCL computer class (Henry Morley building, main UCL campus). Participants can either work on SPM tutorial datasets or on their own data with the help of the faculty.