Advanced techniques in brain MRI

Organizers: Dimitri van de Ville (EPFL/HUG) and Patrik Vuilleumier (UNIGE)

1.5 ECTS

Course sessions will be divided into a theoretical tutorial, research result examples, and practical hands-on demos for the analysis of data

Location

Campus Biotech (please report to the reception at least 15min before course start to receive your visitor badge to enter the building)

Theoretical sessions:
- H4-02-A (building H4, floor 2) on 30/04, 14/05, 28/05 and 01/06
- H8-01-E (building H8, floor 1) on 09/05 and 16/05

Hands-on exercises:
- Salle PC multi-sujets (H4 building, 1st floor)

Topics and dates (all half-day sessions running from 9:00 am to 1:00 pm)
- Monday April 30 - Matteo Bastiani (Oxford): Structural connectivity and tractography
- Wednesday May 9 - Giulia Preti (EPFL): Dynamic functional connectivity
- Monday May 14 - Valerio Zerbi (ETH Zurich): MRI in small animal models
- Wednesday May 16 - Sven Collette (UNIGE): Model-based fMRI
- Monday May 28 - Daniele Marinazzo (Ghent): Effective connectivity with DCM and granger causality
- Friday June 1 - John-Dylan Haynes (Berlin): Multivariate and decoding methods

Credit requirements
Active participation & report/ essay detailing how the methods explained in the course could be applied to one’s own research project.

Introductory papers to the subject are available for download below and should be read before the lecture:
https://www.dropbox.com/s/b7z0ohp23xyx2ye/dMRI_intro_papers.zip?dl=0

Registration (closed now)

Register before April 1, 2018 by writing a mail to lndscourses@gmail.com (with your supervisor in copy) and stating the course title as subject.