

Cours du CENIR 2015

A partir du 9 février 2015

Deux heures tous les lundis, de 14 h à 16 h

Lieu : salle 1-2 au RDC de l'ICM

Course level / pre-requisit

1 : beginner

2 : intermediate

3 : advanced

Topic	Lecturer	Course Level	Course Language	Time	Date
MR physics					
MR physics Introduction to MRI : from nuclear spins physics to image contrast	Francesca Branzoli	1-2	English	14h-15h	February 9
Fonctionnement d'un appareil IRM : champs magnétiques, bobines et images	Mathieu Santin	1	French	15h-16h	February 9
Holidays 14/02 -> 02/03					
MR Spectroscopy : Basic principles and clinical applications	Francesca Branzoli	1-2	English	14h-15h	March 2
Description des séquences d'IRM : anatomique (T1,T2,T2*, ...), fonctionnelles (EPI) et quantitatives, méthodes d'accélération	Mathieu Santin	pre-requisit : attend F. Branzoli's courses	French	15h-16h	March 2
Image pre-processing					
Dicom + NIFTI	Romain Valabrègue	1		14h-15h	March 9
Neurovascular coupling	Habib Benali			15h-16h	March 9
fMRI					
Registration	Daniel Garcia	1		10h-11h	March 20
Interfaces / Stimulation Subject stimulation – behavioral responses collection and data processing	Benoit Beranger (Laurent Hugueville)			11h-12h	March 20
Paradigms Protocol elaboration - specific constraints (MRI MEG EEG)	Anne-Lise Paradis			14h-15h	March 23
Preprocessing IRMf	Romain Valabrègue			15h-16h	March 23
Statistical analyses in functional MRI - Part 1	Mélanie Pelegrini-Issac	1	French (slides in English)	13h-14h	March 30
Statistical analyses in functional MRI - Part 2	Mélanie Pelegrini-Issac	1	French (slides in English)	14h-15h	March 30
Exploitation of results and corrections	Sylvain Charron			15h-16h	March 30
Functional connectivity	Vincent Perlberg		French (talk)	14h-15h	April 13

			English (slides)		
DCM & stats Granger et DCM – IRM + MEEG	Jean Daunizeau			15h-16h	April 13
Other second-level analyses	Sylvain Charron			16h-17h	April 13
Holidays 18/04 -> 04/05					
MEG-EEG					
MEG-EEG Physiological basis of MEG/EEG signal and signal recording	Jean-Didier Lemaréchal	1	French	14h-15h	May 4
Preprocessing MEG-EEG Data preprocessing – artefact correction - Evoked potentials - measures in sensors space	Jean-Didier Lemaréchal	1	French	15h-16h	May 4
Diffusion					
Diffusion : principes de base	Cyril Poupon			14h-15h	May 11
Diffusion : modèles de diffusion	Cyril Poupon			15h-16h	May 11
Diffusion	Michel Thiébaud			14h-16h	May 18
ISMIRM May 30 – June 5 Toronto					
VBM + structural imaging	Daniel Garcia			14h-15h	June 8
Statistical analysis of MEG EEG data	Lydia Cherif			15h-16h	June 8
HBM June 14 – 18 Hawaii MDS June 14 – 18 San Diego					
Introduction à la stimulation magnétique transcrânienne	Jean-Charles Lamy	1-2	French	14h-15h	June 22
Animal imaging	Alexandra Petiet Mathieu Santin	1	French (talk) English (slides)	15h-16h	June 22
MEG-EEG analyses Sources localization	Denis Schwartz	2	French (talk) English (slides)	14h-15h	June 29