DONDOERS NEUROIMAGING TOOL-KIT 2017:
Essentials of major neuroimaging techniques (EEG, MEG, fMRI, PET, TMS)

Date: 28 August – 1 September, 2017
Location: Donders Centre for Cognitive Neuroimaging
OVAL OFFICE
Kapittelweg 29
6525 EN Nijmegen
The Netherlands
Organizer: Dr. Marcel Zwiers

PRELIMINARY PROGRAM

Monday AM
08.30 – 09.00
Welcome & registration
Tildie Stijns
09.00 – 09:15
Welcome
Peter Hagoort
09:15 – 10:45
Basics, strength and weaknesses of different methods: EEG/ERP/MEG
Peter Hagoort

Coffee/tea
11:00 – 12:30
Basics, strength and weaknesses of different methods: PET/fMRI
Peter Hagoort

Lunch

Monday PM
14:00 – 15:00
ERPs applied in cognitive neuroscience
Anne Kösem
15:00 - 15:30
EEG Video + data analysis
Anne Kösem

Tea/coffee
16:00 – 17:00
Ask the experts: Question and answer sessions
Anne Kösem
Tuesday AM

09:00 – 10:00
**MEG: background and application**
Jan-Mathijs Schoffelen

10:00 – 10:30
**MEG Video + data analysis**
Jan-Mathijs Schoffelen

*Coffee/tea*

10:45 – 11:45
**Neuronal oscillations: analysis and applications**
René Scheeringa

11:45 - 12:45
**Measures of synchrony and coherence**
Cristiano Micheli

*Lunch*

Tuesday PM

14.00 - 15.30
**Source reconstruction of EEG and MEG data**
Robert Oostenveld

*Tea/coffee*

16:00 – 17:00
**Ask the experts: Question and answer sessions**
Robert Oostenveld, Jan-Mathijs Schoffelen

18:00 – 22:00

**DINNER**

Mi Barrio
Fransestraat 58
6524 JE Nijmegen
Wednesday AM
09:00 – 10:00
Introduction to fMRI
Jose Marques

10:00 – 11:00
The phenomenological MRI experiment
Jose Marques

Coffee/tea

11:30 – 12:15
Biophysics of Blood Oxygen Level Dependent (BOLD) contrast
David Norris

12:15 – 12:45
The MR-Suite, basic safety and subject preparation
Video

Lunch

Wednesday PM
13:45 – 14:45
TDCS
Wei Liu

14:45 – 15:45
TMS
Leonore Bovy

Tea/coffee

16:00 – 17:00
Ask the experts: Question and answer sessions
Jose Marques, Leonore Bovy, Wei Liu
**Thursday AM**

09:00 – 09:15  
**Stimulus devices, fMRI data acquisition**  
Response devices  
The homunculus and online evaluation  
Video

09:15 – 10:30  
**Parameter choice and artefacts in fMRI imaging**  
Peter Koopmans

10:30 – 10:45  
**Auxiliary measurements EEG/EMG**  
Video

*Coffee/tea*

11:15 – 12:45  
**fMRI data transformation**  
Maarten Mennes

*Lunch*

**Thursday PM**

14:00 - 14:45  
**Experimental Design - fMRI**  
Maarten Mennes

14:45 - 15:30  
**Statistical analysis of fMRI data**  
Maarten Mennes

*Tea/coffee*

16:00 – 17:00  
**Ask the experts: Question and answer session**  
Maarten Mennes, Peter Koopmans

**Friday AM**

09:00 - 10:15  
**Lab visits: EEG/MEG, TMS, MRI**  
Marcel Zwiers

*Coffee/tea*

10:30 – 11:30  
**Voxel-based morphometry**  
André Marquand

11:30 – 12:30  
**Anatomical and functional brain connectivity**  
Marcel Zwiers

12:30 – 13:00  
**Quick lunch, evaluation and testimonies**  
Marcel Zwiers