

## NEUROIMAGING BLOCK COURSE

Neurowissenschaften ZNZ

**2<sup>nd</sup> & 3<sup>rd</sup> May 2022**

The Department of Neuroradiology (USZ) organizes this 2-day course where we introduce you to different techniques (MRI, EEG-fMRI, MRS, PET, MEG, Neurostimulation).

**If permitted, the course will take place in-person at the University Hospital Zurich.**

### DAY 1: MON 2.5. – MAGNETIC RESONANCE IMAGING

#### THEORY (NORD1 C301)

09:00-09:05	Introduction	PD. Dr. L. Michels
09:05-09:50	Basic MR physics	Prof. Dr. D. Nanz
09:50-10:00	BREAK	
10:00-10:30	Structural MRI applications	PD Dr. L. Michels
10:30-11:15	Perfusion MRI (including ASL)	PD Dr. R. O'Gorman Tuura
11:15-11:30	BREAK	
11:30-12:00	Diffusion MRI, white matter architecture and clinical application	PD Dr. P. Stämpfli
12:00-13:30	LUNCH BREAK	

#### IN PRACTICE (NORD1 C301)

13:30-14:00	MR Safety	Dr. R. Lüchinger
14:00-14:30	Artefacts in MRI	Dr. M. Piccirelli
14:30-14:45	BREAK (Transfer for practical session)	
14:45-16:45	<b>PRACTICAL SESSION, 2 groups</b>	
	<b>MR data acquisition</b> Philips Ingenia 3T, MR-center south (V-floor)	J. Popovova, R. Mazloum
	<b>Structural data analysis</b> Sternwartstr. 6, Floor F, F7 & F1, USZ	PD Dr. L. Michels, Dr. R. Büchler

### DAY 2: TUE 3.5. – OTHER TECHNIQUES (DEMONSTRATIONSSAAL PATH B28)

09:00-09:30	Functional-MRI: basics & data analysis	PD Dr. L. Michels
09:30-10:00	Real-time fMRI	J. Popovova
10:00-10:15	BREAK	
10:15-10:45	EEG-fMRI	R. Mazloum

10:45-11:15	Magnetic resonance spectroscopy	PD Dr. R. O'Gorman Tuura
11:15-11:30	BREAK	
11:30-12:00	PET-Imaging: Basics and clinical applications	PD Dr. V. Treyer
12:00-12:30	Neurostimulation: Clinical applications	Dr. M. Moisa

#### ORGANIZER

**PD Dr. Lars Michels**, Head of Basic Research, Department of Neuroradiology, UZH,  
[lars.michels@usz.ch](mailto:lars.michels@usz.ch)

#### REGISTRATION

**DEADLINE: 8. APRIL 2022**

Register via the following form: <https://forms.gle/LLxhyLi1SDD8TtaF8>

Since there are only 12 spaces, we will let you know via email if you have been admitted or if you are on the waiting list.

#### CREDIT POINTS

**1 ECTS**, Requirements: presence during the course incl. the colloquium & summary report after the course.

#### **For Master's students in human medicine:**

*Please note that this is an extracurricular course. Credit points will not count towards the regular studies in human medicine. We can, however, issue a certificate of participation, which you might use to have the 1 ECTS awarded to a future program (e.g. MD-PhD, extra activities during your Master's etc.). It is your responsibility to ensure that your study program recognizes the ECTS acquired in this course.*