

**NEUROIMAGING BLOCK COURSE**

Neurowissenschaften ZNZ

**8<sup>th</sup> and 9<sup>th</sup> May 2023**

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

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

**DAY 1: Monday 08.05.****Kursraum NORD2 C 804/806**

09:15-09:20	Introduction	PD Dr. L. Michels
09:20-10:20	Basic MR physics	Prof. Dr. D. Nanz
10:20-10:30	BREAK	
10:30-11:00	Structural MRI applications	PD Dr. L. Michels
11:00-11:10	BREAK	
11:10-12:00	Perfusion MRI (including ASL)	PD Dr. R. O'Gorman Tuura
12:00-13:00	<b>LUNCH BREAK</b>	
13:00-13:40	MR Safety	Dr. R. Lüchinger
13:40-13:50	BREAK	
13:50-14:30	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>	R. Mazloum, L. Michels
	Philips Ingenia 3T, MR-center south (V-floor)	
	<b>Structural data analysis</b>	Dr. R. Büchler
	Sternwartstr. 6, Floor F, F7 & F1, USZ	

**DAY 2: Tuesday 09.05.****Kursraum NORD2 C 804/806**

09:00-09:40	Real-time fMRI	PD Dr. L. Michels
09:40-09:50	BREAK	
09:50-10:30	Functional-MRI: basics & data analysis	PD Dr. L. Michels
10:30-10:40	BREAK	

10:40-11:20	EEG-fMRI	R. Mazloum
11:20-11:30	BREAK	
11:30-12:10	Magnetic resonance spectroscopy (MRS)	PD Dr. R. O'Gorman Tuura
12:10-13:10	LUNCH BREAK	
13:10-14:00	PET-Imaging: Basics and clinical applications	PD Dr. V. Treyer
14:00-14:10	BREAK	
14:10-15:00	Neurostimulation: Clinical applications	Dr. M. Moisa
15:00-15:10	BREAK	
15:10-15:50	Diffusion MRI, white matter architecture and clinical application	PD Dr. P. Stämpfli
15:50-16:00	Final words, Information about written report	PD Dr. L. Michels

#### ORGANIZER

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

#### REGISTRATION

**DEADLINE: 7. April 2023**

Register via the following form: <https://forms.gle/nccoFk7FxpshzJgo9>

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 & 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.*