USZ Universitäts Spital Zürich

# NEUROIMAGING BLOCK COURSE

Neurowissenschaften ZNZ

## 9./10. Dezember 2026

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).

**The course will take place in-person (no hybrid lectures) at the University Hospital Zurich.**

## DAY 1: 9. Dezember

| **Room** | **NORD1 C 301 (Kursraum 1) · 09:00–12:00** | |
|---|---|---|
| 09:00-09:05 | Introduction | Prof. Dr. L. Michels |
| 09:05-10:05 | Basic MR physics | Prof. Dr. D. Nanz |
| 10:05-10:50 | Functional-MRI: basics & data analysis | Prof. Dr. L. Michels |
| 10:50-11:00 | BREAK | |
| 11:00-11:30 | fNIRS | MSc. Dominik Wyser |
| 11:30-12:00 | Structural MRI applications | Prof. Dr. L. Michels |
| 12:00-13:00 | LUNCH BREAK | |
| **Room** | **NORD1 D 304 (Grosser Hörsaal NORD) · 13:00–15:00** | |
| 13:00-13:30 | Diffusion MRI, white matter architecture and clinical application | Dr. Patrik Wyss |
| 13:30-14:15 | Neurostimulation: Clinical applications | Dr. M. Moisa |
| 14:15-15:00 | Real-time fMRI (neurofeedback) | Prof. Dr. L. Michels |

## DAY 2: 10. Dezember

| **Room** | **NORD2 C 804/806 (Kursraum) · 09:00–13:00** | |
|---|---|---|
| 09:00-09:45 | PET-Imaging: Basics and clinical applications | Prof. Dr. V. Treyer |
| 09:45-10:30 | Magnetic resonance spectroscopy (MRS) | Prof. Dr. R. O'Gorman Tuura |
| **10:30-10:45** | **BREAK** | |
| 10:45-11:30 | Perfusion MRI (including ASL) | Prof. Dr. R. O'Gorman Tuura |
| 11:30-12:15 | MR Safety | Dr. R. Luechinger |
| 12:15-12:30 | BREAK | |
| 12:30-13:00 | Artefacts in MRI | Dr. R. Luechinger |
| 13:00-14:00 | LUNCH BREAK | |
| **Room** | **NORD1 D 304 (Grosser Hörsaal NORD) · 14:00–16:00** | |
| 14:00-14:30 | EEG-fMRI | MSc. M. Rosio |
| 14:30-16:00 | PRACTICAL SESSION, 2 groups | |
| | **MR data acquisition** | M. Rosio, L. Michels |
| | Philips Ingenia 3T, MR-center south (V-floor) | |
| | **Structural data analysis** | Dr. R. Büchler |
| | Sternwartstrasse 6, Floor F, F7 & F1, USZ | |

ORGANIZER

**Prof. Dr. Lars Michels,** Head of Basic Research, Department of Neuroradiology, UZH, lars.michels@usz.ch

REGISTRATION

**DEADLINE: 27 November 2026**

**Register via the following form:**

## Registration Neuroimaging block course HS 2026

**(Firefox)**

Since there are only 14 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.*