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Lectures on MR 2014

Educational courses, exercises, and practical demonstrations
on MR Physics and Engineering

NEW!

**fMRI and optogenetics:
Probing networks in the
animal brain**

June 25–27, 2014

Münster/DE

Programme director:

Klaus Scheffler

Course & local organisers:

Cornelius Faber

Ingrid Fielding

Albrecht Stroh



The course is kindly supported by Bruker.

fMRI and optogenetics: Probing networks in the animal brain

Course venue:

NBZ - Nano-Bioanalytik-Zentrum
Münster GmbH
Mendelstraße 17
48149 Münster/DE

Course language:

English

Educational level:

The course is intended for PhD students, scientists and clinicians working with fMRI, who want to extend their work to include animal models, optogenetics and/or (optical) neurophysiological readouts. Likewise, this course addresses neurophysiologist, who work with optogenetics and/or are familiar with neurophysiological readouts and want to extend their work to include fMRI. Since the course addresses an audience from several different disciplines, each methodology will be introduced from a basic level and will be developed to its state-of-the-art with respect to their combination for multimodal readout of brain activity.

Topics:

- fMRI basics
- Optogenetics basics
- Neurophysiology basics and methods
- Small animal MRI
- Combined readout and stimulation
- Applications

Preliminary faculty:

T. Budde, C. Faber, M. Hoehn, I. Kahn, M. Lange, U. Lindauer, E. Rosales, F. Schmid,
M. Schwalm, A. Stroh, L. Wachsmuth, X. Yu

The Lectures on Magnetic Resonance programme will be applied for accreditation by the European Federation of Organisations for Medical Physics (EFOMP).

A certificate of attendance will be available online for participation in the entire course.