

International Zurich Magnetic Resonance Education Centre



MR Spectroscopy Application Course

in collaboration with:
Philips Healthcare, Best NL and Zurich CH

Next Course:
July 6 – July 10, 2009

AIM:

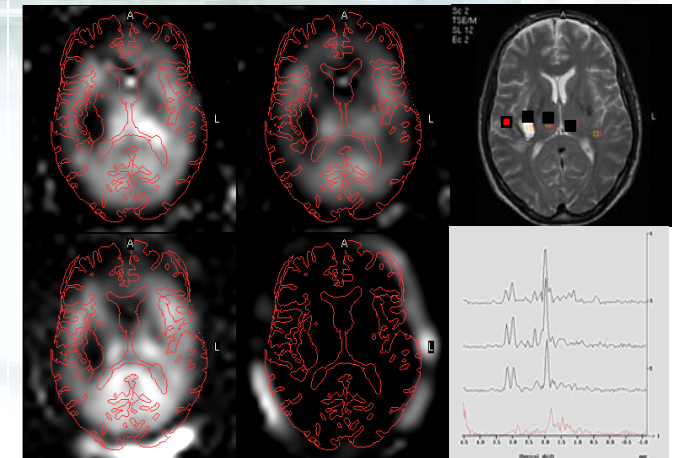
We invite you to attend the 2009 edition of the successful Spectroscopy Application Course, which takes place in Zurich, Switzerland, from the 6th to the 10th of July.

This 5-day course is optimized for MR Physicists and Philips Clinical Scientist - but can also be of interest for radiologists, radiographers or Application Specialists. The main focus is MRS methodology, while also basic neurochemistry and clinical applications are covered. After attending this course the participant should understand the basic principles and techniques of MRS, be able to run MRS exams in different body parts, be able to choose the appropriate parameters for the specific application, know how to export MRS data or Quantification results and have some insight to offline post processing tools. Methods discussed in lectures will not be purely limited to techniques available on Philips Scanners, but will also include research techniques.

The course (based on Software Release 2.6-1) is designed to provide participants with intensive and personalized training through lectures, interactive discussions and hands-on sessions. Four hours of **hands-on practice** per day on both 1.5T and 3T Philips systems, as well as introductions to 7T MRS are included.

Speakers:

- Mrs Xing Chen
ETH, Inst. Biomed. Eng.
- Mr. Alexander Fuchs
ETH, Inst. Biomed. Eng.
- Mrs Susanne Heinzer
ETH, Inst. Biomed. Eng.
- Dr. Anke Henning
ETH, Inst. Biomed. Eng.
- Dr. Dieter Meier
ETH, Inst. Biomed. Eng.
- Mr. Michael Wyss
ETH, Inst. Biomed. Eng.



Organization:

Course fee:

2900 EUR (excl. travel expenses and lodging)

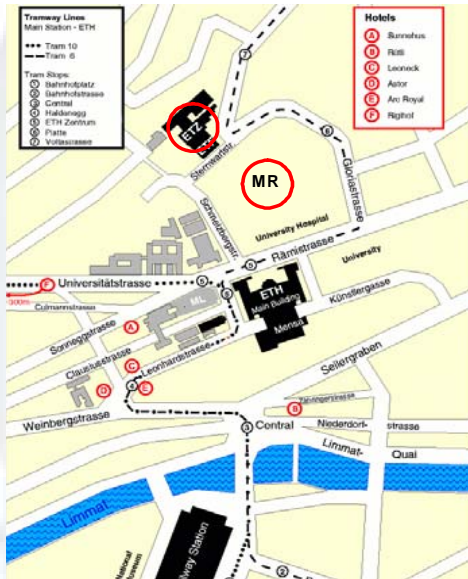
Contact:

Marianne Berg (secretary) berg@biomed.ee.ethz.ch

Dieter Meier (course chairman) dmeier@ethz.ch

Internet (with on-line Registration):

<http://www.biomed.ee.ethz.ch/education/education-centre/spectroscopy-course>



Location:

Theoretical Sessions

ETH Zurich; Institute for Biomedical Engineering ETZ F 71
Gloriastrasse 35, 8092 Zurich SWITZERLAND

Practical Sessions

University Hospital MR Centre Rämistrasse 100
8091 Zurich SWITZERLAND

Topics:

Lectures:

Basics of MRS

- Localization Techniques
- Suppression Techniques
- Workflow and Parameters
- Post processing and Quantification (general)
- SpectroView (Philips Post processing)
- Offline Tools (jMRUI, LCModel)
- Spectroscopic Imaging
- Body I: Prostate
- Body II: Breast, Muscle, Liver, Heart, others
- MRS at 3T
- 31P MRS: basics and techniques
- 31P MRS: applications
- Basic Neurochemistry
- MRS in Clinical Diagnosis
- MRS in Clinical Research
- Reading of MRS Cases
- Artifacts
- Introduction to SENSE and SENSE-SI
- Reports from Clinicians of patient examinations.

Hands-on:

- Single Voxel 1H MRS in the Brain
- 2D and 3D MRSI, TSI in the Brain
- Single Voxel and 3D MRSI in the Prostate
- Breast 1H MRS
- Muscle 1H MRS
- Liver 1H MRS
- 31P MRS in vivo
- Post processing and Quantification with SpectroView
- Introduction to jMRUI and LCModel
- Reading Session with Radiologist

