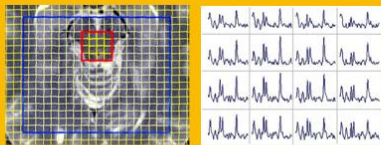




## **Proton MR Spectroscopy in Neuroradiological Diagnostics**

**Workshop on the impact  
of proton spectroscopy in  
neuroradiological MR examinations.**

**Tübingen, 22./23. February 2019**



## **Introduction**

**Dear Colleagues,**

MR proton spectroscopy is a long known method in radiological examinations, which provides valuable additional diagnostic information. Nevertheless it is not used in many radiological sites due to a lack of experience with the measurement sequences and the evaluation technique. In our workshop, several specialists of spectroscopic measurements in neuroradiological applications will share their experiences and approaches to this technique.

The workshop focuses on the most common applications. In addition, there will be several reports on current research projects using proton spectroscopy in neuroradiological topics.

We are pleased to invite you to our MR workshop in the University Hospital of Tübingen.

Prof. Dr. U. Klose    Prof. Dr. U. Ernemann

## **Program**

**Friday, 22.2.2019**

### **2.30 pm Introduction**

Ulrike Ernemann, Tübingen: Welcome address

Uwe Klose, Tübingen:  
Overview of the workshop topics

### **2.40 pm Session I**

Steffi Dreha-Kulaczewski, Göttingen, Germany: The clinical value of proton MRS for pediatric neurometabolic diseases

Adam Berrington, Baltimore, USA: MRS to detect ketone bodies in glioma patients undergoing ketogenic diet therapy

Gunter Helms, Lund, Sweden: MRS Experiences at the 7T Philips scanner in Lund

Samaira Younis, Kopenhagen, Denmark: Effects of sildenafil and CGRP on brainstem glutamate levels

Samuel Gröschel, Tübingen, Germany: MR spectroscopy in metachromatic leukodystrophy

### **4.30 pm Coffee break**

## Program

### 5.00 pm Session II

Benjamin Bender, Tübingen, Germany:  
The use of MR Spectroscopy for differentiation of radio necrosis and relapse in brain tumors

Paweł Wawrzyniak, Gliwice, Poland:  
Usefulness of magnetic resonance spectroscopy in spinal cord tumors

Annett Werner, Dresden, Germany: Influence of striatal "baseline" GABA levels on the cognitive effects of an acute alcohol intoxication

Marzena Wylezinska-Arridge, London, UK:  
Experience in clinical 1H MRS including detection of 2HG

Ulrich Pilatus, Frankfurt/M., Germany: A short review on methods and software tools for analysis of 1H MRS spectra

Adriane Gröger, Erlangen, Germany: Actual possibilities for spectral evaluation at Siemens systems

### 7.00 pm Light meal and get-together

## Saturday, 23.2.2019

### 9.00 am Session III

Gilbert Hangel, Vienna, Austria: Towards fast ultra-high resolution 3D-MRSI of gliomas at 7T: Stepstones and results

Robert Paweł Banyś, Krakow, Poland : 1H-Spectroscopy in routine practice and clinical trials - experience of the Radiology Department Krakow.

Adam Berrington, Baltimore, USA: Cross-vendor standardization of a 3 T MRS protocol

## Program

### Session III cont.

Ralph Noeske, General Electric, Germany:  
First results of a multi-site, multi-vendor study using automatic voxel prescription (AutoVOI) and semi-LASER

Michał Staniszewski, Gliwice, Poland : Quality Control Procedure Based on Partitioning of NMR Time Series

### 11.00 am Coffee break

### 11.30 am Session IV

Katharina Wenger, Frankfurt/M, Germany, :  
Restricted ketogenic diet and fasting in combination with re-irradiation in glioblastoma impact intracellular pH and intracerebral metabolism

Gilbert Hangel, Vienna, Austria: The benefits of ultra-high resolution MRSI at 7T for the detectability of neurochemical changes in multiple sclerosis

Xiaoqi Ding, Hannover, Germany: Clinical applications of whole-brain magnetic resonance spectroscopic imaging: Preliminary experience

Elham Rahimian, Tehran, Iranian Republic:  
The impact of MR spectroscopy in pediatric diagnostics

David Hundertmark, Tübingen, Germany:  
Unclear enhanced signals in brain tumours: glycine or myo-inositol?

### 1.30 pm End of the workshop

## Registration

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Workshop fee: 100 €

The workshop is applied for accreditation as training course by the Medical Association (Ärztekammer) Baden-Württemberg (8 Fortbildungspunkte (FP) in Kategorie A).

## Venue

**University Hospital Tuebingen**  
Building 410 (Childrens Hospital) Lecture Hall  
Tübingen, Germany