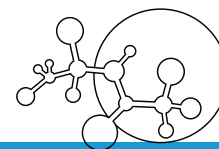


# Program Synopsis

## Black Forest Focus on Soft Matter 6

Saig, July 26-29, 2011



### Tue, July 26

#### Speaker

#### Title

from 16:30

Arrival

Opening Lecture (Chair: Jan G. Korvink)

18:30 - 19:30

David Hoult  
(CNRC)

Magnetic Resonance and Radio Waves or Scepticism is the Highest of Duties

19:30 - 20:00

Dinner

20:00 - 22:00

Postersession I and Dessert Buffet

### Wed, July 27

#### Speaker

#### Title

Session 1 (Chair: Jan G. Korvink)

09:00 - 09:30

John A. Sidles  
(University of Washington)

Transport Mechanisms for Inducing Dynamic Nuclear Polarization in Magnetic Resonance Microsystems: Dynamical Theory, Design Rules, and Experimental Protocols

09:30 - 09:45

09:45 - 10:15

Martino Poggio  
(Basel University)

Recent progress in force-detected MRI

10:15 - 10:30

10:30 - 11:00

Coffee Break

Session 2 (Chair: Jürgen Hennig)

11:00 - 11:30

John Lindon  
(Imperial College London)

NMR-based metabonomics in the clinic: the challenges of real-time patient phenotyping for diagnosis, optimised treatment and prognosis

11:30 - 11:45

11:45 - 12:15

Stan Sykora  
(Extra Byte, Castano Primo)

Some Thermodynamic and Quantum Aspects of NMR Signal Detection

12:15 - 12:30

12:30 - 14:00

Lunch Break

14:00 - 17:30

Walk / Hiking Activity (ca. 2-3h moderate hiking)

17:30 - 18:30

Free time

18:30 - 19:00

Dinner

19:00 - 22:00

Postersession II

### Thu, July 28

Session 3 (Chair: Marcel Utz)

09:00 - 09:30

Bernhard Blümich  
(RWTH Aachen)

Small magnets and their use in NMR relaxometry, imaging, and spectroscopy

09:30 - 09:45

09:45 - 10:15

Dimitris Sakellariou  
(CEA Saclay)

Miniaturized NMR and MRI

10:15 - 10:30

10:30 - 11:00

Coffee Break

Session 4 (Chair: Ulrike Wallrabe)

11:00 - 11:30

Stan Sykora  
(Extra Byte, Castano Primo)

The Role of Relaxation in NMR Signal Detection

11:30 - 11:45

11:45 - 12:15

Frank Engelke  
(Bruker Physik GmbH)

On quantum limits of electromagnetic fields in magnetic resonance

12:15 - 12:30

12:30 - 14:00

Lunch Break

Session 5 (Chair: Jürgen Hennig)

14:00 - 14:30

Marcel Utz  
(University of Virginia)

Integrating Microfluidics and NMR Spectroscopy Through Wireless Coupling

14:30 - 14:45

15:15 - 15:30

Vlad Badilita  
(Freiburg Universität)

Wirebonding technology for  $\mu$ -MR methodology

15:30 - 16:00

Coffee & Cake

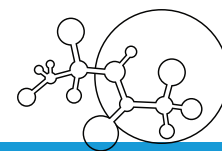
Session 6 (Chair: Vlad Badilita)

16:00 - 16:30

Luisa Ciobanu  
(CEA Saclay)

Progress in High Resolution Magnetic Resonance Microscopy at Ultra High Field

16:30 - 16:45



### Thu, July 28 (continued)

16:45 - 17:15	Christian L. Degen (MIT)	Towards nanoMRI using scanning probe microscopy techniques
17:15 - 17:30		
17:30 - 18:30	Free time	
18:30 - 20:00	Banquet Dinner sponsored by Bruker AG	

### Fri, July 29

#### Speaker

#### Title

#### Session 7 (Chair: Ulrike Wallrabe)

09:00 - 09:30	Hans W. Spiess (MPIP Mainz)	Signal Enhancement in NMR by Hyperpolarization
09:30 - 09:45		
09:45 - 10:15	Jan Bernd Hövener (University Clinic Freiburg)	<sup>13</sup> C MR signal enhancement by parahydrogen hyperpolarization
10:15 - 10:30		
10:30 - 11:00	Coffee Break	

#### Session 8 (Chair: John A. Sidles)

11:00 - 11:30	Masoyoshi Esashi (Tohoku University)	Micro probes and coils for microscopic magnetic resonance imaging
11:30 - 11:45		
11:45 - 12:15	Tetsuo Kobayashi (Kyoto University)	Optically pumped atomic magnetometers toward ultra-low field MRI systems
12:15 - 12:30		
12:30 - 14:00	Lunch Break	
	Departure	