Publication

The proceedings will appear as a paperback book and as e-proceedings distributed by Springer. The books will be available at the conference.

Call for papers

Authors are requested to submit an abstract of not more than 500 words using the online form at www.iwmpi.uni-luebeck.de before September 30, 2011. The abstracts will be reviewed by two referees. With notification of acceptance the authors will be asked to submit a full paper.

Language

The workshop language is English.

Time Schedule and Important Dates

Deadline for submission of abstracts	September 30, 2011
Notification of acceptance	October 31, 2011
Deadline for reduced-rate registration	December 12, 2011
Deadline for full manuscripts	December 12, 2011
Workshop	March 15-16, 2012

Further information

For further information please contact the workshop chairs or secretary and consult our conference homepage at:

http://www.iwmpi.uni-luebeck.de

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Please forward the announcement to colleagues in your department who are involved in the topic of magnetic methods and imaging in medicine.

Support

IHK Lübeck · BRUKER · Life Science Nord · PHILIPS sense and simplicity · LANXESS Energizing Chemistry

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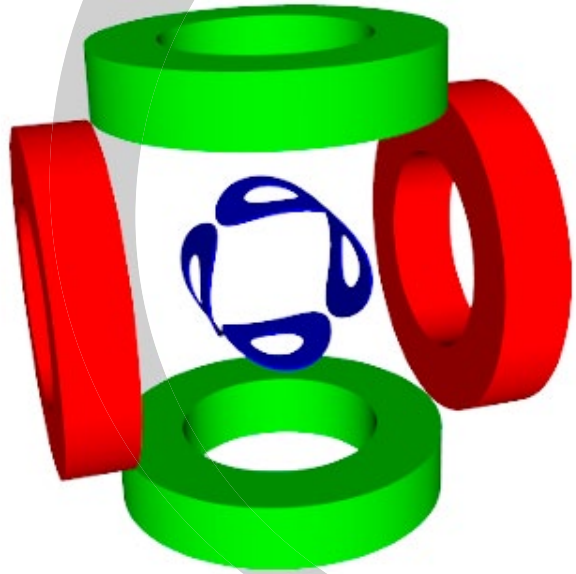
DGBMT GERMAN SOCIETY FOR BIOMEDICAL ENGINEERING WITHIN VDE · AGMT Arbeitsgemeinschaft Medizintechnik in Schleswig-Holstein e.V.



2nd International Workshop on

Magnetic Particle Imaging IWMPI 2012

Lübeck, March 15–16, 2012

Call for Papers

organized by

UNIVERSITÄT ZU LÜBECK
TECHNOLOGIETRANSFER | MEDISERT

Scope and Aim

Magnetic Particle Imaging (MPI) is a novel imaging modality which uses various static and oscillating magnetic fields, as well as tracer materials made from iron oxide nanoparticles to perform background-free measurements of the particles' local concentration. The method exploits the nonlinear re-magnetization behavior of the particles and has the potential to surpass current methods for the detection of iron oxide in sensitivity and spatio-temporal resolution.

The workshop aims at covering the status and recent developments of both, the instrumentation and the tracer material, as each of them is equally important in designing a well performing MPI. Furthermore, the workshop focuses on presenting results from phantom and pre-clinical studies, as well as application scenarios for MPI.

Following a successful first-timer in 2010, the workshop will provide the opportunity to present your research and results to a highly interested audience of professionals and academic experts active in the field of MPI.

The workshop will be held at the University of Lübeck. The meeting is planned as a two-day, single-track meeting with oral presentations and demonstrations.

Keynote Lectures

The Next Generation of MPI
B. Gleich, Philips Research Hamburg

X-Space MPI: Theory, Hardware, Reconstruction Algorithms and Resolution Limits
S. Conolly, UC Berkeley

Optimizing Tracers for Magnetic Particle Imaging
K. Krishnan, University of Washington

Topics

Workshop topics include (but are not limited to):

- Application scenarios
- Filter and coil design
- Data acquisition
- Imaging chain and field simulation
- Magnetic particle spectroscopy
- Nanoparticle development
- Pharmaceutical formulation
- Particle models and relaxometry
- Magnetic carriers
- Nanoparticle separation techniques
- Reconstruction methods
- Sequences and FFP trajectories
- Spatial encoding
- SAR and PNS simulations
- Signal amplification and processing
- High power field generation
- System noise

Boards

Workshop Chairs
T. M. Buzug, University of Lübeck
J. Borgert, Philips Research Europe–Hamburg

Program Committee

C. Alexiou, University Erlangen; **J. Barkhausen**, University Clinics Schleswig-Holstein, Campus Lübeck; **J. Borgert**, Philips Research Europe–Hamburg; **J. Bulte**, Johns Hopkins University, School of Medicine, Baltimore; **T. M. Buzug**, University of Lübeck; **S. Conolly**, UC Berkeley; **O. Dössel**, University of Karlsruhe; **S. Dutz**, IPHT Jena; **D. Finas**, University Clinics Schleswig-Holstein, Campus Lübeck; **B. Gleich**, Philips Research Europe–Hamburg; **U. Häfeli**, University of British Columbia, Vancouver; **J. Haueisen**, Technical University Ilmenau; **M. Heidenreich**, Bruker BioSpin; **U. Heinen**, Bruker BioSpin; **T. Knopp**, University of Lübeck; **F. Kießling**, University of Aachen; **K. Krishnan**, University of Washington; **M. Kuhn**, Philips Healthcare Hamburg; **M. Magnani**, Università degli Studi di Urbino; **Q. Pankhurst**, Davy-Faraday Research Laboratory, London; **J. Rahmer**, Philips Research Europe–Hamburg; **M. Schilling**, TU Braunschweig; **G. Schütz**, Bayer HealthCare Pharmaceuticals; **M. Taupitz**, Charité Berlin; **B. ten Haken**, University of Twente, **L. Trahms**, PTB Berlin; **J. B. Weaver**, Dartmouth Medical School; **J. Weizenecker**, Karlsruhe University for Applied Science; **B. Wollenberg**, University Clinics Schleswig-Holstein, Campus Lübeck; **Y. Ishihara**, Meiji University

Organization

K. Botterweck, MEDISERT

Registration

Full registration fee is 295 € per person and includes a copy of the proceedings and a voucher for the evening event. Reduced-rate student registration is 90 € not including extras. Reduced registration fee before December 12, 2011 is 260 €.