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Dates, Registration, Organization

Important Dates

Deadline for submission of contributions	Nov 12, 2016
Notification of acceptance	Dec 21, 2016
Deadline for revised manuscripts	Feb 25, 2017
Deadline for reduced-rate registration	Feb 25, 2017
IJMPI papers online	Mar 23, 2017

Registration

Early bird registration (until Jan 25, 2017)	370 €
Full registration	390 €
Student registration (without Evening Event)	190 €
Tutorials	100 €
Additional copy of Book of Abstracts	20 €
Additional voucher for Evening Event	90 €

Early-Bird and Full Regular Registration fee include the Evening Event.

Host

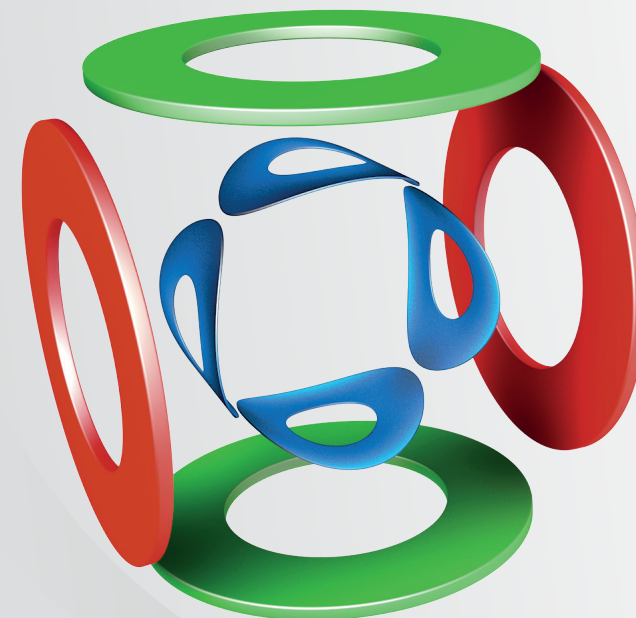
First Faculty of Medicine, Charles University, Prague, Czech Republic hosts the IWMPi 2017 workshop.
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Technical Support and Publication

Infinite Science GmbH, BioMedTec Wissenschaftscampus
Maria-Goepfert-Str. 1, 23562 Lübeck, Germany
Contact: info@iwmpi.org

For further information please contact the workshop chairs or secretary and consult the conference homepage at
> www.iwmpi.org

 Infinite Science
Conferencing



7th International Workshop on Magnetic Particle Imaging

March 23-24, 2017
First Faculty of Medicine, Charles University,
Prague, Czech Republic
Call for Papers

The Workshop

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 remagnetization 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 at presenting results from recent and ongoing studies, both in the pre-clinical and medical field, as well as from non-medical applications, e.g. materials testing.

Started in 2010 at the University of Lübeck, the workshop takes place for the 7th time after visiting Istanbul in 2015, Berkeley in 2013 and Lübeck in 2016, 2014 and 2012. The workshop will provide the opportunity to present research work, results, but also new ideas and directions in the field of Magnetic Particle Imaging to a highly interested audience of scientific, medical and application experts from university, clinical and commercial sites active in the field.

Support



Time Schedule

Thursday, March 23, 2017

Registration,
Tutorials,
Scientific Sessions,
Evening Event

Friday, March 24, 2017

Scientific Sessions,
Wrapping Up,
Lab Tour

Call for Papers & Journal Publication

Authors are invited to submit a structured manuscript of at least 4 pages. Paper templates may be downloaded at www.iwmpi.org. Manuscripts will be accepted only, if the template format is used accurately.

Each submission will be peer-reviewed and, if accepted, published in the open-access International Journal on Magnetic Particle Imaging (IJMPI - journal.iwmpi.org). At the conference there will be available a printed version of the book of abstracts, containing the abstracts of the respective IJM-PI submission. Submissions not accepted for publication as IJM-PI journal article, but being accepted as conference contribution will appear in book of abstracts.

To be included in the journal publication, a submission of your manuscript (latest on November 12, 2016) and presentation your research at the conference is mandatory. All submission to the IWMP-2017 must be prepared as a research article to IJM-PI. Each article will undergo at least one but not more than two review and revision iterations. Accepted papers will appear in IJM-PI, 2017, Vol. 3, No 1 (Guest Editor: Ludek Sefc, Prague; Editor-in Chief: Tobias Knopp, Hamburg; Journal Manager: Christian Kaethner, Lübeck).

Topics

Workshop topics include (but are not limited to):

- Medical, pre-clinical, and non-medical applications
- Coil and field generator design
- Data acquisition and signal pre-processing
- Signal generation, amplification and filter design
- Magnetic field simulation and system modeling
- Magnetic particle spectroscopy (MPS)
- Nanoparticle development
- Particle physics and simulations
- Reconstruction methods
- Sequences, acquisition protocols and spatial coding
- Physiological compatibility, SAR and PNS
- Scanner geometries and system design

Tutorials

The workshop will start on Thursday, March 23, 2017 with two tutorials to provide a thorough introduction to instrumentation, image reconstruction, tracer development, and ongoing pre-clinical studies to those new in the field of Magnetic Particle Imaging. Tutorials are not included in the workshop registration and must be booked separately.

Instrumentation Image Reconstruction in MPI

Tutorial on field design and instrumentation. Different scanner topologies, methods for coil design and the concept for the signal chain will be illustrated and discussed. In a second part, model-based and measurement-based image-reconstruction techniques will be derived and discussed in terms of spatial and temporal resolution as well as sensitivity and SNR.

Tracer Materials and Applications of MPI

Tutorials on tracer materials for MPI with emphasis on chemical, biochemical, and physiological aspects of synthesizing and formulating tracer materials as well as on promises and challenges of pre-clinical applications and translational aspects of MPI.

International Journal on MPI

The International Journal on Magnetic Particle Imaging (IJMPI) has been launched as a future format for publishing high quality research articles on MPI. The scope of the IJM-PI covers all MPI workshop topics. Articles will be published online with open access under a Creative Commons License.

[Journal Homepage > journal.iwmpi.org](http://journal.iwmpi.org)

