

2008 NSS-MIC Dresden



How to reach the workshop:

Please visit www.mr-pet-juelich.de for detailed information.

Shuttle service

Shuttle service between the IBIS hotels at Aachen and the Forschungszentrum Jülich will be provided.



Registration:

Please visit www.mr-pet-juelich.de to register online.

The registration fee is 70 € (after Sept. 30: 80 €) (for students 30 €, after Sept. 30: 40 €)

There is no additional registration fee for the attendees of the IEEE NSS/MIC symposium at Dresden when registered until Sept. 30. Afterwards the registration fee is 15€.

The number of attendees will be limited to 100.

Location:

Lecturing Hall of the Central Library, Building 4.7, Helmholtz-Ring H3

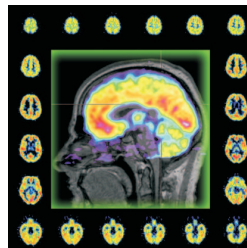
Accommodation:

Please visit www.mr-pet-juelich.de for information on housing.

Sponsored by:

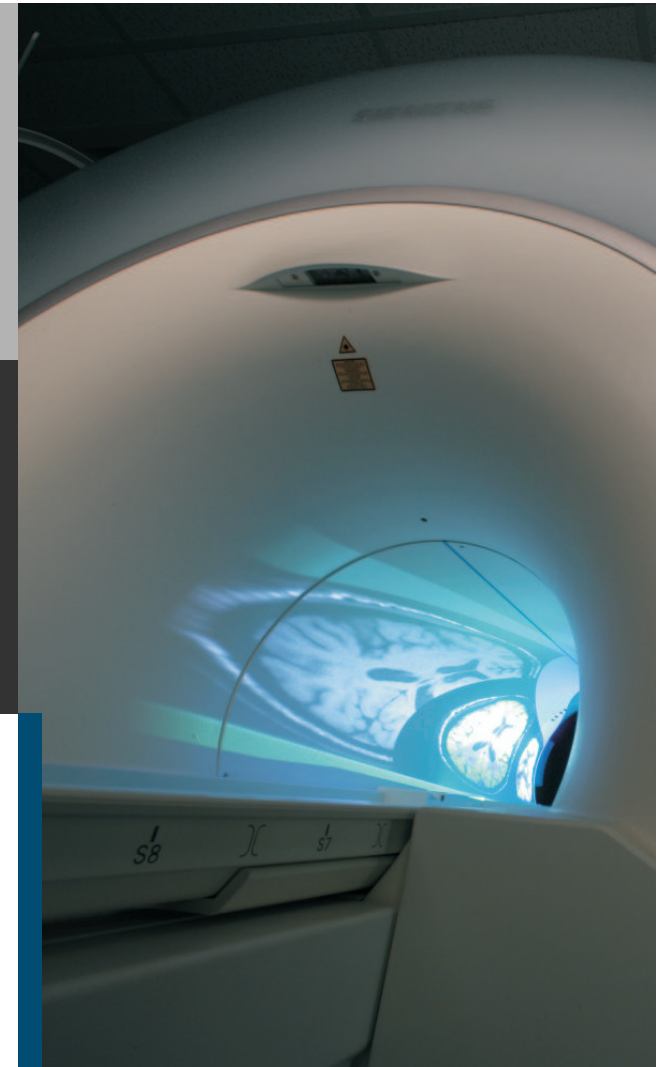
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Information:
www.mr-pet-juelich.de

Contact:
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MR-PET: A Hybrid Imaging System

Satellite workshop of the
2008 IEEE NSS/MIC Symposium

October 27-28, 2008
Forschungszentrum Jülich, Germany



Program

Monday, 27. Oct. 2008

8.00 **Departure from hotels with shuttle bus to Jülich**

9.00 **Registration**

10.00 **Welcome addresses and introductory lectures**
Moderation: H. Herzog, K. Ziemons (Jülich)

A. Bachem (Chairman of the Board of Directors, Jülich)
J. Shah (Director Brain Imaging Physics, INB-3, Jülich)

10.20 Hybrid imaging: Expectations and hopes towards MR-PET
(T. Kuwert, University Erlangen)

10.50 **Coffee break**

11.15 The Philips MR-PET-Project (V. Schulz, Philips, Aachen)

11.45 The Siemens MR-PET-Project (R. Krieg, Siemens, Erlangen)

12.30 **Lunch break**

14.00 **State-of-the-art of small animal MR-PET scanners**
Moderation: P. Vaska (Brookhaven National Laboratory, Upton)
Keynote-lecture by B. Pichler (University Tübingen)

14.30 Performance assessment of the combined microPET Focus 120@ and split magnet MR System. (R. Hawkes, Cambridge)

14.50 Evaluation of an MR compatible PET scanner for pre-clinical molecular imaging studies (J.E. Mackewn, London)

15.10 Discussion

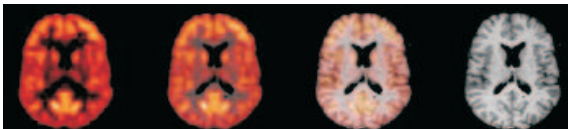
15.30 **Coffee break**

16.00 **State-of-the-art of human MR-brain PET scanners**
Moderation: K. Wienhard (MPI Cologne)
Keynote-lecture by M. Schmand (Siemens, Knoxville)

16.30 Optimizing MRI-PET inserts for uniform spatial resolution and enhanced efficiency (C. Thompson, Montreal)

16.50 MR-compatible blood sampler for PET (J. Breuer, Cologne)

17.10 Discussion



Program

Monday, 27. Oct. 2008 (cont'd)

17.30 **Sightseeing INB-3**

18.30 **Departure of shuttle bus to IBIS hotels**

20.00 **Dinner at the Water Tower Belvedere, Lousberg, Aachen**



Tuesday, 28. Oct. 2008

8.00 **Departure from hotels with shuttle bus to Jülich**

9.00 **Issues of quantitative PET in hybrid imaging**
Moderation: U. Pietrzyk (Jülich)
Keynote-lecture by D. Townsend (Univ. of Tennessee, Knoxville)

9.30 MR-PET hybrid image processing: The next challenge
(L. Caldeira, Lisbon)

9.50 Attenuation correction in hybrid MR-brainPET imaging
(E. Rota Kops, Jülich)

10.10 Discussion

10.30 **Coffee break**

11.00 **Improved MR-compatible PET components**
Moderation: S. Tavernier (VUB Brussels)
Keynote-lecture by Y. Choi (Samsung Medical Center, Seoul)

11.30 Study of monolithic scintillator blockdetectors for PET using APD and SiPMT arrays (P. Bruyndonckx, Brussels)

11.50 Applying ClearPEM technology to PET-MRI (J. Varela, Lisbon)

12.10 Discussion

12.30 **Lunch break**

Program

Tuesday, 28. Oct. 2008 (cont'd)

14.00 **Advantages and challenges of whole-body MR-PET**
Moderation: J. Perez (CIEMAT Madrid)
Keynote-lecture by G. Delso (Technical University Munich)

14.30 High performance PET detectors for whole body clinical PET/MR that do not use shielded cables (C.S. Levin, Stanford)

14.50 Anatomical accuracy of lesion localization in retrospective automatic rigid image registration between FDG-PET and MRI (A. Kiefer, Erlangen)

15.10 Discussion

15.30 **Coffee break**

16.00 **Future MR-PET scanners utilizing ultra-high field MR**
Moderation: P. Marsden (King's College, London)
Keynote-lecture by J. Shah (Jülich)

16.30 Acquisition of simultaneous PET-MRI images with the RatCAP PET scanner in the 9.4T microMRI (D. Schlyer, Brookhaven)

16.50 Dual tracer approaches: Possible applications in hybrid MR-PET imaging (H. Iida, Osaka)

17.10 Discussion

18.00 **Concluding remarks**

18.30 **Farewell**

19.00 **Departure of shuttle bus to Aachen and Düren**

Organized by:

Hans Herzog, FZJ Jülich, Germany
Simon Cherry, UC Davis, USA
José M. Pérez, CIEMAT Madrid, Spain
Bernd Pichler, Univ. Tübingen, Germany
Uwe Pietrzyk, FZJ Jülich, Germany
Jon Shah, FZJ Jülich, Germany

Stefaan Tavernier, VUB Brussels, Belgium
Paul Vaska, Brookhaven NL, USA
Klaus Wienhard, MPI Cologne, Germany
Sibylle Ziegler, TU München, Germany
Karl Ziemons, FZJ Jülich, Germany



Eastern front of the former Castle Jülich