

ORGANISING BODIES

EFOMP European Federation of Organisations for Medical Physics

Udine University Hospital "S. Maria della Misericordia"

AIFM Italian Association of Medical Physics

ESMRMB European Society of Magnetic Resonance in Medicine and Biology

With the sponsorship of:

- Udine University, Faculty of Medicine
- SIRM Magnetic Resonance Section
- SISSA International School for Advanced Studies
- ICTP International Centre for Theoretical Physics
- AIFM Medical Physics School "P. Caldirola"

SCIENTIFIC COMMITTEE

Massimo Bazzocchi, Udine, I (Udine University)

Stelios Christofides, Nicosia, Cy (EFOMP)

Maria Assunta Cova, Trieste, I (SIRM)

Paolo Ferrari, Trento, I (AIFM)

Gisela Hagberg, Roma, I (AIFM)

Renata Longo, Trieste, I (ICTP, Trieste University)

Renato Padovani, Udine, I (AOUUD)

Alfonso Ragozzino, Napoli, I (SIRM)

Raffaella Rumiati, Trieste, I (SISSA)

Klaus Scheffler, Base, CH (ESMRMB)

Fritz Schick, (ESMRMB)

Oliver Speck, G (ESMRMB)

Alberto Torresin, Milan, I (EFOMP)

Michela Tosetti, Pisa, I (AIFM)

ORGANISING COMMITTEE

Marco Band, Faustino Bonutti, Margherita Crespi,

Claudio Foti, Marta Maieron, Maria Rosa Malisan,

Eugenia Moretti, Annalisa Trianni

Conference Chairman

Renato Padovani

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IMPORTANT DATES

- Abstract submission deadline 15 June 2010
- Notification of abstract acceptance 30 June 2010
- Early Registration deadline 15 July 2010

GENERAL INFORMATION

Venue

Congress Centre HypoBank

Via Alpe Adria, 2, 33010 Tavagnacco Udine
Italy

Registration fees

	Early Registration	Late Registration
Members	200 €	250 €
Junior Members	100 €	150 €

The fee includes the book of abstracts, proceedings, coffees and lunches.

Refresh course: registration fee includes course lectures.
The cost of the social dinner is 50 €.

Registration and abstract submission

Registration and abstract forms can be downloaded at congress website www.udine2010.fisicamedica.org

Continuous Programme Development (CPD)

The scientific sessions and the refresher courses will be accredited according to Italian regulation (ECM) and EFOMP policy.

Accommodation

Rooms have been blocked in different hotels. Information on conference website www.udine2010.fisicamedica.org.
For booking please contact the hotel of your choice directly, by email or fax.

For information

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IV European Conference of Medical Physics on

Advances in High Field Magnetic Resonance Imaging

Udine, Italy
23–25 September 2010

SCIENTIFIC PROGRAMME



CONFERENCE – PROGRAMME *

THURSDAY 23

11.00 OPENING CEREMONY

SESSION I - Development of methods and technology for high-field MRI Chair: S. Christofides, O. Speck

11.30 Travelling wave MR - *R. Pohmann (D)*

12.00 Novel motion correction techniques - *M. Zaitsev (D)*

12.30 Novel pulse sequence approaches addressing high-field limits -
O. Speck (D)

13.00 Lunch

SESSION II - Development of methods and technology for high-field MRI Chair: F. Schick, M. Tosetti

14.00 Design of High Field Magnets and MR Scanners for Biomedical
Use - *G. Hurst (USA)*

14.30 Clinical MultiTransmit MRI - The Why and The How. - *P. Harvey
(NL)*

15.00 Parallel transmission: current and future applications of multi-
dimensional RF pulses - *U. Katscher (D)*

15.30 7 T Italian project - *M. Tosetti (I)*

16.00 Ultra High field MRI of the future - *F. Schmitt (D)*

16.30 Coffee Break

17.00 ORAL PRESENTATIONS

FRIDAY 24

SESSION III - Recent advancements in MR applications Chair: M. Bazzocchi, M. A. Cova

9.00 Novel contrast media - *S. Aime (I)*

9.30 MRI-guidance in surgery - *M. Skrap (I)*

10.00 Improved imaging of joints at higher fields - *S. Trattnig (A)*

10.30 Coffee Break

11.00 ORAL PRESENTATIONS

12.30 Lunch

SESSION IV – Neuroimaging Chair: M. Skrap, P. Ferrari

13.45 Neuroimaging: anatomy - *G. Basso (I)*

CONFERENCE - PROGRAMME *

14.10 Cortical structure observed by phase contrast at high fields - *R.
Pohmann (D)*

14.35 Anatomical and spatial components in imitation of intransitive
actions - *R. Ruminati (I)*

15.00 Combining behavioral, rTMS and fMRI data in the understanding
of the role of Right temporal parietal junction during emotional
egocentricity bias - *G. Silani (CH)*

15.15 Coffee Break

SESSION V – Quality Assurance Chair: A. Torresin, F. Levrero

15.40 Geometric accuracy, functional sensitivity and specificity:
optimization experiences for human functional neuroimaging at 4 T -
J. Jovicich (I)

16.05 Quality of fMRI studies - *P. Ferrari (I)*

16.30 ORAL PRESENTATIONS

SATURDAY 25

SESSION VI – Safety Issues and Regulation Chair: P. Allisy-Roberts, P. Vecchia

9.00 Protection of patients in MRI: the position of ICNIRP - *P. Vecchia (I)*

9.30 Regulation of occupational EMF exposure in MRI - where are we?
- *S. Keevil (UK)*

10.00 The Medical Physics Expert for Non-Ionizing Radiation Applications
in the Healthcare Environment - *P. Allisy-Roberts (F)*

ORAL PRESENTATIONS

11.00 Coffee Break

SESSION VII – Educating and training – ROUND TABLE Moderators: O. Speck (ESMRMB), S. Christofides (EFOMP)

EFOMP-ESR Medical Physics Education Guidelines -
W. Van der Putten (IR)

Education and Training of Medical Physicists
IOMP Recommendations - *F. Nussling (D)*

11.30 MRI Physics Education for Diagnostic Radiographers - an initial
study - *C. Caruana (Malta)*

EMIT project for e-Training in Medical Imaging (MRI module) –
S. Tabakov (I)

13.00 Closing ceremony

REFRESH COURSE - PROGRAMME

WEDNESDAY 22

Introduction to MR techniques: from spins to image contrast Chair: A. Torresin

14.00 Contrast mechanisms (T1 T2 T2*) - *M. Cercignani (I)*

15.00 Basic Hardware: magnet, gradients and RF coils - *G. Hagberg (I)*

16.00 Coffee Break

16.30 Image formation in MR imaging: from k-space to parallel imaging
J. Bittoun (F)

17.30 Discussion

THURSDAY 23

Introduction to MR techniques: from spins to image contrast Chair: G. Hagberg

8.00 Radio Frequency Coils: Basic Principles and Advanced
Applications - *M. Alecci (I)*

9.00 Origins of Image distortion and artifacts - *J. Andersson (UK)*

10.00 Changes in MR physics when moving to higher field strengths:
drivers for methods and technology development - *F. Schick (D)*

FRIDAY 24

Introduction to scientific sessions Chair: M. Tosetti

8.00 High Field MR applications: what can we expect? - *O. Speck (D)*

8.45 Discussion

Guided Exercise

Chair: O. Speck, M. Tosetti

17.30 Susceptibility-weighted imaging imaging and data processing
R. Bowtell (UK)

18.30 Discussion

SATURDAY 25

Introduction to scientific sessions Chair: R. Longo

8.00 Safety at high field – where do we stand? - *S. Keevil (UK)*

8.45 Discussion

(* this short programme includes only the invited presentations)