

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

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Maria Assunta Cova, Trieste, I (SIRM)

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Raffaella Rumiati, Trieste, I (SISSA)

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

Med. Phys. Dpt., University Hospital, Udine, Italy

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IMPORTANT DATES

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

GENERAL INFORMATION

Venue

Congress Centre HypoBank

Via Alpe Adria, 2

33010 Tavagnacco UD

Italy

Registration fees

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

The number of participants to the practical exercises is limited to 30 medical physicists.

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

The cost of the social dinner is 50 €.

Registration

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

Continous 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. You can read more on the congress website. To book your room, please contact the hotel of your choice directly, by email or fax.

For any further information please contact:

trianni.annalisa@aoud.sanita.fvg.it



IV European Conference of Medical Physics on

Advances in High Field Magnetic Resonance Imaging

Udine, Italy

23–25 September 2010

**SECOND ANNOUNCEMENT
AND CALL FOR PAPER**



WELCOMING MESSAGE

I have the pleasure to invite You to the IVth European Conference of Medical Physics, focused on the Advances in High Field Magnetic Resonance Imaging that will be hosted in Udine, Italy, from 23 to 25 September 2010.

The conference will be organised jointly by the European Federation of Organisations for Medical Physics (EFOMP), Italian Association of Medical Physics (AIFM), the European Society for Magnetic Resonance in Medicine and Biology (ESMRMB), the Italian Society of Radiology (SIRM) and the "S. Maria della Misericordia" University Hospital of Udine.

Every day new advances in the medical use of Magnetic Resonance are announced, and medical physicists and clinicians are ever more involved in research and clinical activities requiring specific training and arenas where to exchange knowledge and experience. So the major aim of the Conference is to share and discuss the cutting edge solutions in the use of high field systems in Europe. The Conference will be of particular importance for Udine and Friuli-Venezia Giulia Region, where a MR centre with an advanced high field MR scanner is in operation thanks to a joint effort of the Region Administration, the University Hospital, the Section of Neuroscience of International School for Advanced Studies (SISSA), the Scientific Research Institute (IRCSS) "La Nostra Famiglia" and the Faculty of Medicine of the Udine University.

In order to support the training of medical physicists, the AIFM Medical Physics School "Caldirola" (Italy) in collaboration with ESMRMB, will organise a parallel training course on "Advanced Techniques in MR" where theoretical and practical sessions on image and data processing will take place with the support of the most relevant manufacturers and developers.

You are kindly invited to join the Conference to breathe this European atmosphere, establish new relations and get to know the city of Udine, its history and pleasant natural surroundings.

Dott. Renato Padovani
Conference Chairman

SCIENTIFIC PROGRAMME

Development of technology and methods for high-field MRI

- Parallel transmit/receive techniques and SAR calculations
- Parallel imaging
- Novel pulse sequences
- Specific applications: fMRI, MRS, phase contrast imaging, etc.

Recent advancements in MR applications – clinical and physic viewpoint

- Neuroimaging
- Body Applications
- Contrast media
- MRI-guidance in surgery/ radiotherapy

Quality assurance and safety issues

- Distortion correction for surgery and radiotherapy
- Dedicated protocols for fMRI and DTI
- Patient-safety: SAR issues
- Occupational exposure at high fields
- Regulation

Education and training

REFRESH COURSE

Introduction to MR techniques: from spins to image contrast

- MR Principles and contrast mechanisms
- Basic Hardware: magnet, gradients and RF coils
- K-space encoding and image reconstruction
- Parallel Imaging techniques
- Motion correction techniques
- Origins of Image distortion and artifacts

Changes in MR physics when moving to higher field strengths: methods and technology development

High Field MR applications: what can we expect?

Safety at high field: where do we stand?

Practical Exercise: Data Analysis on workstation (limited to 30 participants)

The refresh course for medical physicists on "Advanced techniques in MR" is organised by AIFM Medical Physics School "Caldirola" and the European Society of Magnetic Resonance in Medicine and Biology (ESMRMB)

PRELIMINARY CONGRESS SCHEDULE

Wednesday 22	
14.00-18.00	Refresh course
Thursday 23	
8.00-11.00	Refresh course
11.00-11.30	European Conference of Medical Physics - Opening Ceremony
11.30-13.00	European Conference of Medical Physics – Session 1
14.00-17.00	European Conference of Medical Physics – Session 2
17.00-19.30	Refresh course: practical exercise
Friday 24	
8.00-9.00	Refresh course
9.00-13.00	European Conference of Medical Physics – Session 3
14.00-17.00	European Conference of Medical Physics – Session 4
17.30-19.00	Refresh course: practical exercise
Saturday 25	
8.00-9.00	Refresh course
9.00-13.00	European Conference of Medical Physics – Session 5
13.00	European Conference of Medical Physics - Closing Ceremony

Parallel Events

- EFOMP Annual Council Meeting
- EFOMP Officers Meeting