



Functional and metabolic brain imaging have experienced a tremendous development thanks to techniques based on NMR/MRI. However, the information obtained by NMR/MRI provides only a partial view of brain functioning and can be completed by other imaging modalities. In this workshop we aim at promoting communication, discussion and collaboration between the Italian GIDRM community and scientists involved in electrophysiological imaging.

The workshop will be held at ITAB, University of Chieti, an internationally-known center for multimodal imaging, and will comprise talks presenting the most recent advances in methods and applications of multimodal imaging using NMR/MRI. To foster discussion, during lunch and coffee breaks, participants are invited to present one poster on their recent research results.

Scientific Committee

Marco Geppi, University of Pisa
Lucia Calucci, ICCOM-CNR, Pisa
Donatella Capitani, IMC-CNR, Rome
Mariapina D'Onofrio, University of Verona
Michele Chierotti, University of Turin
Giuseppe Pileio, University of Southampton
Paola Turano, University of Florence
Stefania Della Penna, University of Chieti-Pescara
Cosimo Del Gratta, University of Chieti-Pescara
Marcello Alecci, University of L'Aquila
Angelo Galante, University of L'Aquila
Michela Tosetti, IRCCS Stella Maris e IMAGO7, Pisa
Alessandra Bertoldo, University of Padua
Francesco de Pasquale, University of Teramo
Maurizio Corbetta, University of Padua
Richard Wise, University of Cardiff

Local Organizing Committee (University of Chieti-Pescara)

Stefania Della Penna
Cosimo Del Gratta

Venue

University of Chieti-Pescara, ITAB,
room Galileo - Via Luigi Polacchi, 6610 Chieti

Register online at:

<http://www.gidrm.org/index.php/activities/workshops/2019-workshops/integration-of-nmr-and-mri-with-other-techniques-in-brain-imaging>



RIVOIRA



LIFE FROM INSIDE



Extra Byte



FONDAZIONE

ANTONIO
DE MARCO



BRAIN PRODUCTS IT
Solutions for neurophysiological research

GIDRM Workshop:

Integration of NMR and MRI with other techniques in Brain Imaging

May 30-31 2019, University of Chieti-Pescara, Italy

Program

Thursday, May 30th

12:30-13:35	Registration and Light Lunch
13:35-13:55	Welcome and Opening Marco Geppi, Cosimo Del Gratta, Stefania Della Penna, Vittorio Pizzella
13:55-14:15	Gian Luca Romani: <i>“Multimodal Neuroimaging at ITAB: past, present and future”</i>
	Topic 1: Advanced instrumentation
14:15-15:00 Keynote 1	Rainer Körber: <i>“Imaging intrinsic and impressed currents in the brain - Toward improved functional imaging”</i>
15:00-15:30	Maurizio Marrale: <i>“Thalamic parcellation for transcranial MR-guided Focused Ultrasound Surgery treatments of essential tremor”</i>
15:30-16:00	Angelo Galante : <i>“Very Low Field MRI, a possible companion for MEG”</i>
16:00-16:30	Alessandra Bertoldo: <i>“Bridging structural, metabolic and functional resting state brain networks via multimodal imaging”</i>
16:30-17:00	Coffee break
	Topic 2 Integration of physiology and anatomy
17:00-17:45 Keynote 2	Richard Wise: <i>“Multi-parametric MRI of brain physiology: developing fMRI to quantify brain function”</i>
17:45-18:15	Mauro Costagli : <i>“Ultra High field MRI: challenges and advanced applications”</i>
18:15-18:45	Andrea Duggento : <i>“Reconstructing directed information transfer in complex networks: deep learning-based inference of nonlinear, multimodal effective connectivity”</i>
18:45-19:15	Antonio Maria Chiarelli : <i>“MRI-guided diffuse optical imaging of cortical and cerebrovascular status”</i>
20:00-23:30	Social Dinner

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Program

Friday, May 31st

Topic 3 Advanced Analysis Approaches	
8:30-9:15 Keynote 3	Fabio Babiloni : “Brain computer interfaces for the industrial application of cognitive neuroscience”
9:15-9:45	Nicola Toschi : “Semi-supervised convolutional neural networks and graph attention networks in neuroscience: multidomain data integration and prediction of neurodegenerative disease evolution”
9:45-10:15	Francesco de Pasquale : “Structural and functional topology of integration at rest”
10:15-10:45	Stefania Della Penna : “Influence of task on the ongoing dynamics of integration in the brain”
10:45-11:15	Coffee break
Topic 4 Application of integrated imaging	
11:15-12:00 Keynote 4	Maurizio Corbetta : “ Spontaneous brain activity: evidence for a representational hypothesis”
12:00-12:30	Sara Spadone : “Multimodal imaging of brain activity and connectivity reorganization following different attention operations”
12:30-13:00	Fulvia Palesi : “Multimodal approach to characterize temporal lobe epilepsy”
13:00-13:30	Massimo Caulo : “Multimodal Pre-surgical mapping with fMRI”
13:30-13:45	Marco Geppi : Closing Remarks
13:45-14:30	Light Lunch