

INTERNATIONAL SCHOOL ON MAGNETIC RESONANCE AND BRAIN FUNCTION – XI WORKSHOP

Erice - May, 18th - May, 25th 2014 - PROGRAM

	Monday, 19	Tuesday, 20	Wednesday, 21	Thursday, 22	Friday, 23	Saturday, 24
					<i>SPECIAL SESSION: PHASE CONTRAST X-ray TOMOGRAPHY IN NEUROSCIENCES</i>	
	Chairman <i>Warren Warren</i>	Chairman <i>Jean-Pierre Changeux</i>	Chairman <i>Rolf Gruetter</i>	Sightseeing tour	Chairman <i>Inna Bukreeva</i>	Chairman <i>Daniela Calvetti</i>
8:45	Opening: <i>Bruno Maraviglia</i>					
9:00	Changeux Toward a molecular biology of conscious access: how higher brain functions emerge from signal transmission mechanisms?	Gruetter MR imaging and spectroscopy at high magnetic fields - insights into brain function and metabolism	Bowtell Investigating white matter microstructure using phase imaging		Bravin Low dose phase contrast medical imaging: developments towards clinical applications	Iannetti Avoiding pain: predicting and reacting to threats in the sensory environment
:15						
:30						
:45						
10:00	Hampson Real-time fMRI neurofeedback for treating and studying obsessive-compulsive symptoms	Lanz In vivo 13C MRS in rodents and metabolic modeling of neuroglial metabolism	Mulkern Investigating reversible and irreversible transverse relaxation processes in the brain from detailed studies of single spin echoes: Implications for brain iron deposition and J-coupled metabolite signals		Zanette x-ray phase-contrast and dark-field imaging with a perturbed wavefront: techniques and applications	Lemieux Intra-cranial EEG-fMRI: an update
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:45						
11:00	<i>Coffe Break</i>	<i>Coffe break</i>	<i>Coffe Break</i>			<i>Coffe break</i>
:15						
:30	Bonvento Astrocyte-neuron metabolic coupling in the healthy and diseased brain	Barros Cell imaging tools for brain energy metabolism: new mechanistic insights	Kim Where MRI meets robotics: BCI, deep learning, and hallucinating robots	Fratini: Simultaneous 3D imaging of micro-vascularization and neuronal network ultrastructure of the spinal cord	Sundaram Direct Magnetic Resonance Detection of Neuronal Currents in an in vitro Turtle Cerebellum	
:45				S.Sonnay		
12:00						
:15				Poster session		
:30	Volterra High-resolution two-photon Ca2+ imaging starts to reveal the signal encoding properties of astrocytes	Guilfoyle MR Imaging and Spectroscopy studies of rodent models of neuropsychiatric disorders at 7T	Guttmann Is the thalamus involved in cerebral blood flow regulation?			
:45						
13:00						

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	Chairman <i>Robert Turner</i>	Chairman <i>Felix Wehrli</i>	Chairman <i>Erkki Sommersalo</i>	Sightseeing tour	Chairman <i>Julien Valette</i>	Chairman <i>L. Felipe Barros</i>	
15:00	Tkàc Methodological aspects of MRS	Warren Long lived hyperpolarized compounds, plus Imaging the Cultural Heritage of Italy	Villringer How alpha rhythm shapes brain function and behavior			Wise Mapping cerebral oxygen metabolism	Valette Assessing anomalous diffusion of brain metabolites by diffusion-weighted MR spectroscopy to probe cell structure at all spatial scales
:15							
:30							
:45	Mangia Neurochemical and BOLD responses during neuronal activation measured in the human visual cortex at 7T	Calvetti Oxygen availability determines the glucose partitioning: an in-silico study	Turner 7T MRI--a Game-Changer for Systems Neuroscience			Uludag Understanding and modeling functional MRI dynamics and connectivity	Ronen Diffusion weighted MR spectroscopy of brain metabolites in one and two dimensions - relation to microstructure and physiology
16:00							
:15							
:30	<i>Coffe break</i>	<i>Coffe Break</i>				<i>Coffe break</i>	<i>Coffe Break</i>
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17:00							
:15	Oz High field MRS in Neurodegenerative Diseases	Sommersalo A multi-scale study of ambiguities in parameter estimation for lumped metabolic models	Bifone Brain functional connectivity and autism: an elusive link		Wehrli Whole-brain MRI oximetry	Formisano Combining computational modeling and high-field (7 Tesla) functional MRI	
:30							
:45		A. De Martino Neuron-glia coupling from stoichiometric constraints: exploring the space of feasible metabolic states					Branca MR Thermometry of Fatty Tissues by Hyperpolarized Xenon Gas
18:00							
:15	Poster session						
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19:00							