



May 29-31, 2009
Rome, Italy

7th NFSI & ICBEM 2009

Scientific program of the conference (version 22 April 2009)

Friday 29 May 2009		Morning Session			
		PLENARY SESSION ROOM A			
Time	Author	Title			
9.00	9.15	Babiloni	Welcome to the participants		
9.15	10.00	He	Electrophysiological Source Imaging of the Brain and Heart: Past, Present, and Future		
10.00	10.45	Pfurtscheller	EEG-based BCI - state of the art and future prospects		
10.45	11.15	Coffee break + Poster Session			
11.15	12.00	Pfeifer	A-priori Knowledge Based Cardiac Modeling Approaches for Imaging Patient Individual Cardiac		
12.00	12.45	Blinowska	Transmission of brain activity during cognitive task		
12.45	14.00	Lunch + Poster Session			
14.00	14.30	Koles	Gender differences in brain functional organization during verbal and spatial cognitive challenges		
14.30	15.00	Zouridakis	Information Communication Networks in the Normal and Disease Human Brain		
15.00	15.30	Akay	Coronary Artery Stenosis and Plaque ; Characterizations with an Electronic Stethoscope and Dual Energy CT		
15.30	16.00	Coffee break + Poster Session			

Friday 29 May 2009		Afternoon Sessions	
Time		ROOM A: HEARTH	
16.00	16.30	Wei	A virtual reality for catheter-based EPS based on whole-heart model
16.30	16.45	Kumihashi	Spatial filter with recursively optimized beam response for MCG source imaging
16.45	17.00	Climent	Relation between Atrial Rate and Preferential AV nodal Conduction during Atrial Fibrillation
17.00	17.15	Martin Arthur	Changes in Body-Surface Electrocardiograms from Geometric Remodeling due to Obesity
17.15	17.30	Klonowski	Hybrid Modeling of Cardiopulmonary System,
17.30	17.45	Jiang	Optimization of the Electrode Positions of Multichannel ECG for the Reconstruction of Ischemic Areas by Solving the Inverse Electrocardiographic Problem
17.45	18.00	Wang	A New Method for Estimating Cardiac Transmembrane Potentials from the Body Surface
18.00	18.15	Guillem	Surface Wavefront Propagation Maps: Non-invasive characterization of atrial flutter circuit
18.15	18.30	Morales	Statistical Localization of Arrhythmias Using Precordial ECG leads
Time		ROOM B: BRAIN COMPUTER INTERFACES	
16.00	16.15	Usaki	On The Use of Electrooculogram For Efficient Human Computer Interfaces
16.15	16.30	Sannelli	On optimal channel configurations for SMR-based brain-computer interfaces
16.30	16.45	Krausz	Control of a Smart Home with a Brain-Computer Interface
16.45	17.00	Blankertz	Predicting BCI Performance to Study BCI Illiteracy
17.00	17.15	Vidaurre	Towards a Cure for BCI Illiteracy
17.15	17.30	Bianchi	Which brain areas and components are more suitable for visual P300 BCI?
17.30	17.45	Lind	Automatic Rejection of Outliers in EEG Discriminant and Source Analysis
17.45	18.00	Wu	Music Composition from the Brain Signal : Representing the Mental State by Music
18.00	18.15	van Wijka	Time-frequency analysis reveals distinct synchronization patterns within the motor system
Time		ROOM C: MODELING	
16.00	16.15	De Lucia	Comparing ICA-based and single-trial topographic ERP analyses in human EEG
16.15	16.30	Vrba	Signal Space Separation Beamformer
16.30	16.45	Ursino	A semantic model to study neural organization of language during bilingualism
16.45	17.00	Magosso	Neural Correlates of Multisensory Spatial Attention: A Computational Modelling Study

17.00	17.15	Zavaglia	Rhythms generation in a population of neurons simulated by a neural mass model
17.15	17.30	Goksel Duru	Determination of Neural Fiber Connections Based on Data Structure Algorithm
17.30	17.45	Hernandez-Pavon	Effects of Extremely Low Frequency Magnetic Fields (EFL-MF) on Neuroblastoma
17.45	18.00	Lagana'	DTI parameter optimisation for acquisition at 1.5T: SNR analysis and clinical application
18.00	18.15	Sander	Cross-correlation of motor activity signals from dc- magnetoencephalography, near-infrared spectroscopy, and electromyography

Saturday 30 May 2009		Morning sessions				
		PLENARY SESSION: ROOM A				
	Time	Author	Title			
9.00	9.15	Vestroni	Welcome address			
9.15	9.30	Radwanska	How COST supports research in Europe and in the world			
9.30	10.15	Grave De Peralta	Advanced source models for the analysis of EEG data: Theory and Applications.			
10.15	11.00	Cerutti	Functional assessment of cardiovascular system by means of image and signal processing			
11.00	11.30	Coffee break + Poster Session				
11.30	12.15	Sekihara	Estimating functional connectivity in MEG source imaging			
12.15	12.45	Astolfi	Estimation of time-varying cortical connectivity from high resolution EEG recordings			
12.45	13.15	Del Gratta	Multimodal integration of fMRI and Magnetoencephalographic data			
13.15	14.15	Lunch + Poster Session				

Saturday 30 May 2009		Afternoon Session			
Time		ROOM A : MEG			
14.15	14.30	Owen	Robust Methods for Reconstructing Brain Activity and Functional Connectivity from MEG Data		
14.30	14.45	Della Penna	MEG study of cortico-cortical coherency in patients with motor-neuron degenerative diseases		
14.45	15.00	Huiskamp	Regional differences in the Sensitivity of MEG for Interictal Spikes in Epilepsy		
15.00	15.15	Bucolo	Unsupervised Classification for Nonlinear Dynamical Analysis of Brain MEG Activity		
Time		ROOM B : MULTIMODAL			
14.15	14.30	Manna	Neural bases of focused attention and open monitoring during meditation		
14.30	14.45	Oostendorp	Connecting Mean Field of Neural Activity via EEG and fMRI		
14.45	15.00	Ferretti	Effects of rare deviant somatosensory stimuli and stimulus omissions on human cortical responses: an fMRI study		
15.00	15.15	Tana	Exploring cortical attentional system by using fMRI during a Continuous Performance Test		
15.15	15.30	Visani	Simultaneous EEG-fMRI in patients with Unverricht-Lundborg disease: event-related desynchronization/synchronization (ERD/ERS) and haemodynamic response analysis		
Time		ROOM C: EEG			
14.15	14.30	Hori	3D Cortical Dipole Imaging of Brain Electrical Activity Considering Median Plane		
14.30	14.45	Ventouras	Independent Component Analysis for source localization of EEG sleep spindle components		
14.45	15.00	Vecchiato	Tracking the Brain Activity with the High Resolution EEG a Neuromarketing Experiment		
15.00	15.15	Vatta	Solving the EEG forward problem by realistic and spherical head modeling: a comparative cortex-based analysis		
15.15	15.30	Wendel	The Influence of Age and Skull Conductivity on Surface and Subcutaneous Bipolar EEG Leads		

15.45-16.00 SCIENTISTS LEAVE THE VENUE TOWARD THE GALLERIA BORGHESE AND CASINA VALADIER (social program)

17.00-19.00 VISIT TO THE GALLERIA BORGHESE (included in the registration fee) WITH ENGLISH GUIDE

19.30-22.00 DINNER AT THE CASINA VALADIER (included in the registration fee)

22.30 TRANSPORTATION TOWARD PIAZZA VENEZIA AND BY THE MAIN RAILWAY STATION TERMINI, WHERE MOST OF THE CONFERENCE HOTELS ARE LOCATED

Sunday 31 May 2009		Morning session			
		PLENARY SESSION			
Time		Author	Title		
9.15	10.00	Ioannides	Fast and slow brain activity and connectivity from long MEG data		
10.00	10.45	Michel	Electric Source Imaging in Epilepsy		
10.45	11.15	Coffee break + Poster Session			
11.15	12.00	Mattia	Brain Computer Interface as a tool for neurorehabilitation		
12.00	12.45	del R. Millán	Cognitive Signals for Brain Computer Interaction		
12.45	13.00	Babiloni	Concluding Remarks		