



May 29-31, 2009  
Rome, Italy

## 7<sup>th</sup> NFSI & ICBEM 2009

### 7<sup>th</sup> International Symposium on Noninvasive Functional Source Imaging of the Brain and Heart & 7<sup>th</sup> International Conference on Bioelectromagnetism



## Second Announcement and Call for Paper

Dear colleagues,

The joint 7<sup>th</sup> NFSI & ICBEM 2009 will take place from **29 to 31 May 2009** in Rome. This conference aims to provide a platform for scientific exchange of novel ideas on recent development in the field of functional biomedical source imaging. The conference site is [www.ptsroma.it/nfsicbem2009](http://www.ptsroma.it/nfsicbem2009) where all the information can be found.

The conference will consist of invited lectures delivered by leading scientists in the field, and organized sessions in important areas in functional source imaging and functional biomedical imaging. In the conference, through lectures and poster session, scientists are called to discuss their computational tools in order to offer a comprehensive approach to the problem of the estimation of brain and heart activity and connectivity.

The conference will offer a state-of-the-art review of the advanced neuroelectromagnetic and hemodynamic brain and heart processing methods currently applied in several leading research institutions in the world.

Selected papers from the conference **will be published on international scientific journals such as Brain Topography, Computational Intelligence and Neuroscience and International Journal of Bioelectromagnetism.**

**The venue of the conference is unique:** in the centre of the old Rome, in close contact with its 2000 years of history. In fact, the conference venue is located in the Engineering Faculty, which was at **500 meters** from the Colosseo and Fori Romani and 20 meters from the San Pietro in Vincoli hosting the stunning Michelangelo's Moses statue. Rome in end of May is at the maximum of its beauty.

We hope to see you in Rome next May!!

Fabio Babiloni, Serenella Salinari  
Conference Chairs

## Information about the Conference

### Areas of interest:

Scientific contributions will be welcomed but not limited to the fields of

- o Electroencephalography, Magnetoencephalography, functional Magnetic Resonance Imaging
- o Mathematical and computer models for neurons and neural tissues
- o Theory and algorithms in forward problem for heart and brain
- o Inverse problem and source imaging
- o Mapping techniques
- o Estimation of connectivity techniques from neuroelectric and/or hemodynamic recordings
- o Brain-Computer Interface (BCI)

### Contribution format:

Contributions for the conference are in form of a 4 page paper according to the instruction for the Authors given on the conference WEB site at the following link:

<http://www.ptsroma.it/NFSICBEM2009/default.asp?id=pag1&lan=en&cogan=&idan=&link=Paper%20Submission>

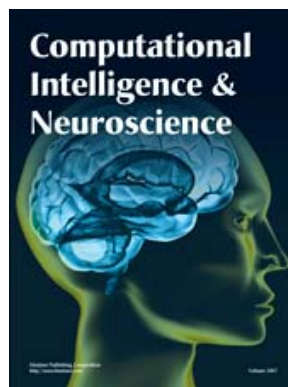
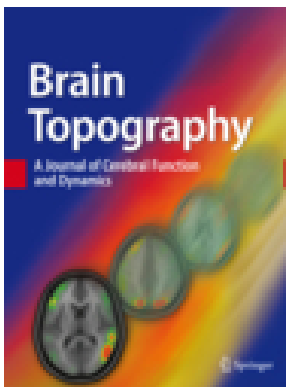
### Publication of conference papers:

Papers from the conference will be selected for the publication in three different peer-review scientific journals that will generate a special issues devoted to the conference event. In particular, after peer review process, the conference papers will be published on the following journals

#### *Brain Topography*

#### *Computational Intelligence and Neuroscience*

#### *International Journal of Bioelectromagnetism*



### Important dates:

Abstract submission: **28 February 2009**

Notification to the Authors: **15 March 2009**

Early registration: **30 March 2009**

Late registration: **20 April 2009**

**Speakers:**

<b>Name</b>	<b>Affiliation</b>	<b>Title of the talk</b>
<b>Dr. Laura Astolfi</b>	Universita' di Roma "Sapienza"	<b>Estimation of time-varying cortical connectivity from high resolution EEG recordings</b>
<b>Prof. Katarzyna Blinowska</b>	Dept. Biomedical Physics, University of Warsaw	<b>Transmission of brain activity during cognitive task</b>
<b>Prof. Sergio Cerutti</b>	Politecnico di Milano	<b>Functional assessment of cardiovascular system by means of image and signal processing</b>
<b>Dr. Febo Cincotti</b>	IRCCS S.Lucia Roma	<b>Brain computer interfaces for communication and control</b>
<b>Dr. Rolando Grave de Peralta</b>	University Hospital of Geneve	<b>Advanced source models for the analysis of EEG data: Theory and Applications.</b>
<b>Prof. Bin He</b>	University of Minnesota	<b>Functional Imaging of Brain and Heart Activity</b>
<b>Prof. Andreas Ioannides</b>	RIKEN Institute Wako-shi	<b>Fast and slow brain activity and connectivity from long MEG data</b>
<b>Prof. Zoltan Koles</b>	University of Alberta	<b>Gender differences in brain functional organization during verbal and spatial cognitive challenges</b>
<b>Dr. Donatella Mattia</b>	IRCCS S.Lucia Roma	<b>Brain Computer Interface as a possible tool for facilitation of the communicative abilities of severe brain injury patients</b>
<b>Prof. Christoph Michel</b>	University Hospital of Geneve	<b>Electric Source Imaging in Epilepsy</b>
<b>Prof. Jose' Millan</b>	Ecole Polytechnique Fédérale de Lausanne	<b>Brain Computer Interfaces</b>
<b>Prof. Paul Nunez</b>	Tulane University	<b>Why hearts don't love and brains don't pump: EEG correlates of conscious experience</b>
<b>Prof. Bernhard Pfeifer</b>	University for Health Sciences, Medical Informatics and Technology, Hall Tyrol	<b>A-priori Knowledge Based Cardiac Modeling Approaches for Imaging Patient Individual Cardiac Function</b>
<b>Prof. Gert Pfurtscheller</b>	Technical University of Graz,	<b>EEG-based BCI - state of the art and future prospects.</b>
<b>Prof. Gian Luca Romani</b>	Universita' di Chieti	<b>Multimodal integration of fMRI and Magnetoencephalographic data</b>
<b>Prof. Kensuke Sekihara</b>	Tokyo Metropolitan University	<b>Estimating functional connectivity in MEG source imaging</b>
<b>Prof. Daming Wei</b>	University of Aizu	<b>A virtual reality for catheter-based EPS based on whole-heart model</b>
<b>Prof. George Zouridakis</b>	University of Houston	<b>Information Communication Networks in the Normal and Disease Human Brain.</b>

**Social program:**

We will visit the Galleria Borghese, an ancient palace in the heart of Rome where stunning masterpieces of art (Caravaggio, Canova, Tiziano and others) are exposed.



*From left to right, some masterpieces observable at the Galleria Borghese by; Antonello da Messina, Raffaello, Caravaggio.*

A link to this important art gallery in Rome is the following:

<http://www.galleriaborghese.it/borghese/en/edefault.htm>

In addition, social dinner will be held in a unique site, at the Casina Valadier in the heart of Villa Borghese, near to the Galleria Borghese.



<http://www.casinaladier.it/home.asp?IDLang=2&IDNav=1>

**Registration :**

Early registration (deadline 20 March 2009): €400

Late registration (deadline 20 April 2009): €450

PhD student: €300

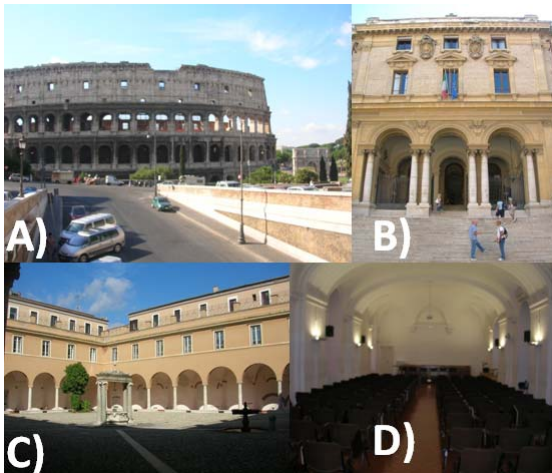
On-site registration: €500

Registration fees cover the attendance to all congress sessions and exhibition, conference materials, lunches and coffee breaks as well as the social dinner in an exclusive location in Rome.

Registration fee for PhD students will not cover the social dinner banquet. However, tickets for the banquet will be purchased in advance through the WEB site or at the registration desk.



## Venue:



The Joint Meeting will be held from 29 to 31 May 2009 in Rome, at the Engineering Faculty of Rome, in the historical centre of Rome, at 500 mt from the Coliseum and 20 mt from the Church of San Pietro in Vincoli, where the Michelangelo's Moses is exposed.

*The venue for the conference is located at the heart of old Rome city, about 500 mt from the Colosseo (A) and from the Fori Imperiali. The venue is located also at 20 mt from the ancient Roman church of San Pietro in Vincoli, where the chain of San Pietro (the first Pope in Rome about 2000 years ago) are showed, together to the masterpiece of Michelangelo, Moses.*

*Within the Engineering Faculty (B; main entrance) there is a 300 years old cloister where the coffee break and poster session will be served (C) and there is also the hall that will be used for the conference (D).*



*Michelangelo's Moses (left) and the internal of the church of San Pietro in Vincoli in Rome (right) just located near to the conference venue*

## Conference Sponsors

- 1) International Society for Functional Source Imaging
- 2) International Society for Bioelectromagnetism
- 3) COST Action BM0601 "NEUROMATH".
- 4) Italian Ministry of Foreign Affairs

