



COST Action NEUROMATH – Workshop 2007

SECOND ANNOUNCE and CALL FOR PAPERS

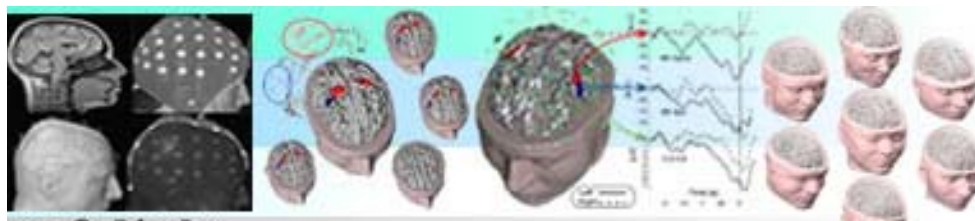
March

NeuroMath: Advanced Methods for the Estimation of Human Brain Activity and Connectivity

4-5 December 2007

Conference Center “IRCCS Fondazione Santa Lucia”
Via Ardeatina 354, Rome, ITALY

The main objective of the NEUROMATH Workshop is to describe the state of the art in the use of advanced mathematical methods for the estimation of the human cortical activity and connectivity from non invasive neuroelectric and hemodynamic measurements. In the NEUROMATH workshop, 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 activity and connectivity for sensory and cognitive tasks. The NEUROMATH workshop will offer a review of the advance neuroelectric and hemodynamic brain processing methods currently applied in several leading European and Asiatic research institutions. The NEUROMATH workshop will host scientists from 21 European countries, Japan and China.



Areas of interest:

Scientific contributions will be welcomed in the fields of

- o Electroencephalogram, Magnetoencephalogram, functional Magnetic Resonance Imaging
- o Mathematical and computer models for neurons and neural tissues
- o Theory and algorithms in forward problem
- 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:

A poster session will host posters from scientists attending the conference. A max of 2 page paper it is expected. The Author instructions are the same for a submission to the International Journal of Bioelectromagnetism, available at <http://www.ijbem.org/>

Venue:

The Workshop will be held the 4 and 5 December 2007 in Rome, at the Conference Centre located at the IRCCS Fondazione Santa Lucia, via Ardeatina 354 Rome. The venue is a large conference centre with up to 300 seats.

**Publication:**

A selection of the best posters and the invited talks will be published on a special issue of the International Journal of Bioelectromagnetism (IJBEM; www.ijbem.org)

Fee:

The participation fee is 100 euros for the early registration and 150 euros on site, that are intended to cover the cost of beverages meals and the materials distributed at the conference.

Organizing committee:

Prof. Fabio Babiloni, University of Rome “Sapienza”, Rome, Italy

Prof. Maria Grazia Marciani, University of Rome “Tor Vergata”, Rome, Italy

Dr. Donatella Mattia, IRCCS Fondazione Santa Lucia, Rome, Italy

Dr. Febo Cincotti, IRCCS Fondazione Santa Lucia, Rome, Italy

Contacts:

Information on the conference, paper submissions and registration:
info@neuromath.eu

Important dates:

Paper submission: **30 October 2007**

Early registration: **5 November 2007**

Conference celebration: **4-5 December 2007**

Speakers:

Prof. Sylvain Baillet, Cognitive Neuroscience & Brain Imaging Lab., Paris, France

Prof. Anastasios Bezerianos, Biosignal Processing, University of Patras, Greece

Prof. Andrzej Cichocki, RIKEN Institute, Japan

Prof. Katarzyna Cieslak-Blinowska, Dept. of Biomedical Physics, Warsaw, Poland

Dr. Febo Cincotti, IRCCS Fondazione Santa Lucia, Rome, Italy

Prof. Shangkai Gao, Tsinghua University, Beijing, China

Dr. Rolando Grave de Peralta, Electrical Neuroimaging Group, Geneva, Switzerland

Dr. Andrea Kübler, University of Tübingen, Germany

Prof. Juergen Kurths, Institut für Physik Universität, Potsdam, Germany

Prof. Andreas Ioannides, RIKEN Institute, Japan

Dr. Donatella Mattia, IRCCS Fondazione Santa Lucia, Rome, Italy

Prof. José del R. Millán, IDIAP Research Institute, Lousanne, Switzerland

Dr. Adrian Owen, Cognition & Brain Sciences Unit, Cambridge, United Kingdom

Prof. Gert Pfurtscheller, University of Graz, Austria

Workshop Sponsors:

The NEUROMATH workshop is organized by the COST Action BM0601 "NEUROMATH".

<http://www.neuromath.eu>

 NeuroMath

 ADVANCED METHODS FOR THE ESTIMATION OF HUMAN BRAIN ACTIVITY AND CONNECTIVITY

Ministero degli Affari Esteri, Directorate Generale per la Promozione Culturale e la Cooperazione

<http://www.bci2.org>

 | Ministero degli Affari Esteri

I.Li.Tec. - Independent Life Technologies

<http://www.ilitec.org/>

 I.Li.Tec.
Independent Life Technologies

International Society of Bioelectromagnetism

<http://www.isbem.org/>



The Institute of Electrical and Electronics Engineers
Engineering in Medicine and Biology Society
IEEE EBMS

<http://www.embs.org/>



The NEUROMATH COST ACTION Advanced methods for the estimation of human brain activity and connectivity

<http://www.neuromath.eu>

Funding: COST Action BM0601 NEUROMATH, <http://www.cost.esf.org>

Duration: March 2007 - December 2011

Aim The main objective of the Action is to increase the knowledge on the mathematical methods able to estimate the cortical activity and connectivity in the human brain from non invasive neuroelectric and hemodynamic measurements

How joint to the COST See the rules at <http://www.cost.esf.org/index.php?id=9#faq>