

BRAIN-FETs 2014: 1st Clustering Workshop on Future Emerging NeuroTechnologies:
*Neurotechnologies, Computational methods & Experimental approaches
for tomorrow's brain science and technologies*

Venue: *Istituto Italiano di Tecnologia (IIT), Genova, Italy*

Dates: *16th-17th October 2014*

Keywords: *Community building, networking, and initial road-mapping*

The human brain remains rather poorly understood and, in terms of its dysfunctions, it represents a formidable societal challenge for science and technology. The European FET community, built around a visionary decades-long funding programme of the European Commission, has been particularly active in key R&D domains, relevant for human health applications as well as for ground-breaking, brain-inspired, information and communication novel technologies. The many research projects, supported over the years by the EC within the FET programme on these themes, displayed a unique and rich diversity and covered a wide spectrum of disciplines, beyond engineering, biology, and medicine. For ongoing projects, daily lab activities have become so interdisciplinary that many young scientists already receive ad hoc training in a wide and constantly expanding range of fields, including engineering, nanotechnology, material science, theoretical, and experimental neuroscience.

Such an interdisciplinary scenario requires a constant effort to link together ongoing activities transversally, among projects, and to join forces among the researchers involved, to pave the road to the next steps in tackling future Neuroscience and Neurotechnological challenges. This workshop aims at clustering a relatively small subset of the European FET community, particularly active on Brain inspired ICT, Neurotechnologies, novel materials, and computational approaches. In addition, bringing scientists together and opening all the sessions to external participations, the workshop importantly aims at identifying the scientific and technological challenges of ongoing research and refining its most urgent priorities, crucial for the future of European R&D in Brain research and Neurotechnologies. By a selection of presentations from ongoing EC sponsored research projects, we aim at catalyzing the discussion and initiating a brainstorming for a joint road-mapping of the future Brain-FET research, besides setting the ground for novel collaborations and activities.

The format of the workshop consists in a two-days event, organized at the Istituto Italiano di Tecnologia of Genova, and in a networking evening. The cluster of those EC-funded projects who organize the event, is characterized by common efforts, integrating innovative developments on future emerging technologies applied to Neuroscience, and qualified by a synergy among diverse experimental, computational, and engineering approaches.

The workshop is a unique opportunity to learn about ongoing research and to critically contribute in designing next steps in FETs, successfully facing the many challenges that await. Participants from EC-funded projects are welcome to present their research in a poster session and to meet colleagues with a heterogeneous background and from all over Europe.

The workshop is limited to 150 participants, privileging scientific discussions and exchange of knowledge.

Organizers:

Luca Berdondini, Istituto Italiano di Tecnologia, Italy – <http://www.iit.it/en/people/luca-berdondini.html>

Michele Giugliano, University of Antwerp, Belgium – <http://www.ua.ac.be/michele.giugliano>

Contributing projects and consortia

BRAINLEAP, <http://www.brainleap.eu>, Coordinated by M. Giugliano

ENLIGHTENMENT, <http://enlightenment-fp7.eu>, Coordinated by C. Bartic

CORTICONIC, <http://www.corticonic.org>, Coordinated by M. Sanchez-Vives

CSN II, <http://csnetwork.eu>, Coordinated by P. Verschure

RENVISION, <http://www.renvision-fp7.eu>, Coordinated by V. Murino

Si-CODE, <http://www.sicode.eu>, Coordinated by S. Panzeri

NAMASEN, <http://www.namafen.net>, Coordinated by M. Giugliano

MERIDIAN, <http://www.fp7-meridian.eu>, Coordinated by M. Nesladek

NEUROSEEKER, <http://www.neuroseeker.eu>, Coordinated by P. Ruther

BRAINBOW, <http://www.brainbowproject.eu>, Coordinated by M. Chiappalone

RAMP, <http://www.rampproject.eu>, Coordinated by S. Vassanelli

Interested? Register as soon as possible by filling online the registration form available at

<http://goo.gl/f8eWr8>

The conference registration fee, covering coffee breaks, lunches and the social dinner is: **100 eur**.

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