





## Open your mind!

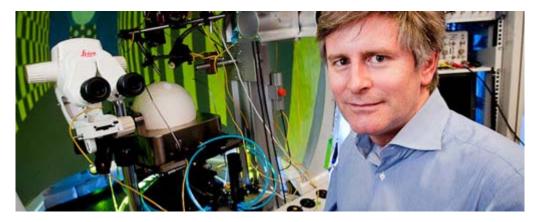
European Month of the Brain May 2013 #brainmonth

## Scuola di Studi Superiori dell'Università di Torino Thursday, 16 May - h. 17:30

Aula Magna del Dipartimento di Scienze della Vita e Biologia dei Sistemi Università degli Studi di Torino - Via Accademia Albertina n. 13, Torino

## From neural networks to behaviour

Prof. Michael Häusser, University College, London



Michael Häusser is interested in understanding the cellular basis of neural computation, focusing on dendritic function and processing of synaptic input in relation to network activity in the intact brain. His work integrates approaches and techniques at different levels of brain function to study the cellular basis of information processing in the cerebellar and cerebral cortex. He uses a combined strategy of in vitro and in vivo imaging and electrophysiology, taking advantage of a range of high-tech approaches developed in his lab. These include two-photon imaging techniques, patch-clamp recordings from axons and dendrites and simultaneous recordings from multiple synaptically connected cells. His experiments are complemented by computational models of single neurons and networks of neurons. His aim is to link different levels of brain function, in order to reveal how activity in single neurons and neural circuits encodes defined behaviours and, importantly, what kinds of changes take place within these circuits during learning.

**Michael Häusser** is Professor of Neuroscience at University College London and a Wellcome Trust Principal Research Fellow. Prof. Häusser trained at University of Oxford, the Max-Planck-Institute for Medical Research in Heidelberg and the Ecole Normale Supérieure in Paris. He established his own laboratory at UCL in 1997.

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