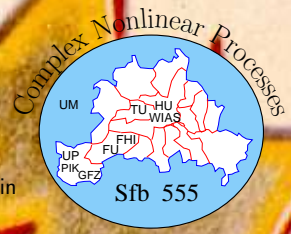




Bernstein Center for Computational Neuroscience Berlin



International Workshop in Berlin 2009, as part of the Eighteenth Annual Computational Neuroscience Meeting CNS\*2009

# Modeling Migraine From Nonlinear Dynamics to Clinical Neurology

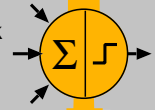
**Scientific coordinators:** Markus A. Dahlem (TU Berlin) and Sebino Stramaglia (University of Bari & INFN)

## Advisory board:

- Marina de Tommaso (University of Bari, Italy)
- Jens Dreier (Center for Stroke Research Berlin, Germany)
- Eckehard Schöll (TU Berlin, Germany)
- Klaus Obermayer (TU Berlin, Germany)
- Alfred Lehmenkühler (Schmerzzentrum Düsseldorf, Germany)

## Invited speakers:

- Barreto, Ernest, The Center for Neural Dynamics, George Mason University, USA
- Dahlem, Markus, Institut für Theoretische Physik, Technische Universität Berlin
- Fernandez de Lima, Vera Maura, UFSJ Divinópolis, Brazil
- Fröhlich, Flavio, Yale University School of Medicine, USA
- Gardner-Medwin, Tony, University College London, UK
- Guedes, Rubem C.A., Laboratory of Neurophysiology and Nutrition, Recife, Brazil
- Florence, Gerson, Department of Biomedical Engineering, Unicamp, Brazil
- Friedrich, Thomas, Institute of Chemistry, Technische Universität Berlin
- Heimburg, Thomas, Membrane Biophysics Group, Niels Bohr Institute, University of Copenhagen, Denmark
- Herreras, Oscar, Instituto Cajal CSIC, Madrid, Spain
- Müller, Michael, Neuro- und Sinnesphysiologie, Georg-August-Universität Göttingen
- Schimansky-Geier, Lutz, Institut für Physik, Humboldt Universität, Berlin
- Pietrobon, Daniela, Department of Biomedical Sciences, Italy
- Richter, Frank, Institute of Physiology I - Neurophysiology, Friedrich Schiller Universität Jena
- Somjen, George G., Duke University, USA
- Stramaglia, Sebino, University of Bari and INFN, Italy
- Starmer, Frank, Duke-NUS Medical School Singapore
- Shepherd, Alex, Birkbeck University of London, UK
- de Tommaso, Marina, University of Bari, Italy
- Wadman, Wytse, University of Amsterdam, Netherlands
- Wilkinson, Frances, York University, Canada
- Wilson, Hugh R., York University, Canada



First day, July 22nd, Wednesday 2009

Introductory overview " *Why simulate Cortical Spreading Depression?*" by G. Somjen.

Morning sessions: **Ion Dynamics & Excitability in Migraine**

Afternoon sessions: **Cellular & Membrane Models, Neural Control, and Genetics in Migraine**

Second day: July 23rd, Thursday 2009

Morning sessions: **Synchronization, EEG, and Hyper- vs Hypo-Excitability in Migraine**

Afternoon sessions: **Imaging, Neurovascular coupling, and Spatial Patterns in Migraine**

CNS 2009 will consist of three days of main meeting (Sunday-Tuesday) followed by two days of workshops (Wednesday-Thursday). The main meeting will be held in the Hilton hotel in central Berlin, overlooking the historic Gendarmenmarkt, in immediate vicinity of famous landmarks as e.g. the Brandenburg Gate, and remnants of the Berlin Wall with the notorious border station "Checkpoint Charlie". The city hosts a large neuroscientific community within its "Bernstein center for Computational Neuroscience".

More at: [www.cnsorg.org/2009/](http://www.cnsorg.org/2009/)