



MPIPKS, Dresden, Germany
 IFISC, Palma de Mallorca, Spain



Trends in Complex Systems

International Workshop on Synchronization and Multiscale Complex Dynamics in the Brain

Dresden, November 02 - 06, 2009

Scientific coordination:

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Progress in understanding the global organization of brain functions has remained elusive up to now. Indeed, normal operation of the brain is characterized by complex dynamics at multiple temporal and spatial scales. Although different experimental techniques exist (microelectrode recordings, EEG, MEG, and fMRI, among others), a simultaneous monitoring of the different scales is still scarce. Interpretation of the data coming from such experiments requires a thorough understanding of how different scales integrate in a complex dynamical system. Within this context, the purpose of this workshop is to bring together experimental neuroscientists and physicists experienced in the study of multiscale processes, in order to help bridge the gap currently existing between theoretical and experimental approaches.

Invited Speakers:

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|----------------------------------|------------------------------|------------------------------|
| S. Boccaletti (Firenze) | G. Gómez-Herrero (Tampere) | B. Scheller (Frankfurt/Main) |
| H. Braun (Marburg) | G. Laurent (Pasadena) | L. Schimansky-Geier (Berlin) |
| M. Breakspear (Sydney) | B. Lindner (Dresden) | T. Siapas (Pasadena) |
| J. L. Cantero (Sevilla) | F. Maestu (Madrid) | W. Singer (Frankfurt/Main) |
| M. Chavez (Paris) | E. Pereda (La Laguna) | F.T. Sommer (Berkeley) |
| G. Deco (Barcelona) | A. Pikovsky (Potsdam) | C.J. Stam (Amsterdam) |
| V.M. Eguíluz (Palma de Mallorca) | D. Postnov (Saratov) | M. Tsukada (Tokyo) |
| R. Goebel (Maastricht) | M. Sánchez-Vives (Barcelona) | A.E.P. Villa (Grenoble) |

Applications for participation and contributions are welcome and should be made by using the form on the workshop webpage. The number of attendees is limited. The applicants' registration fee for the workshop is 100 Euro. Costs for accommodation will be covered during the workshop. Limited funding is available on request to partially cover travel expenses. Please note that childcare is available upon request.

Deadline for applications is: **June 30, 2009.**

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