



## **GABA 1<sup>ST</sup> Scientific Workshop**

May 28-30, 2008, Tampere, Finland

Tampere University of Technology, Tietotalo Building, room TB222

# **DETAILED PROGRAM**

### **Wednesday, May 28, 2008**

10:15 – 10:30 Opening remarks

#### **WP1: Functional Connectivity**

10:30 – 11:00 Current status of WP1

*Mario Chavez (CNRS)*

11:00 – 11:30 Disentangling the modular structure of functional brainwebs

*Miguel Valencia (CNRS)*

#### **11:30 – 12:00 Coffee break**

12:00 – 12:30 Time-frequency small-world behavior in human brainwebs

*Mario Chavez (CNRS)*

#### **WP2 : Abnormal Synchronization**

12:30 – 12:45 Current status of WP2

*José Luis Cantero (UPO)*

12:45 – 13:30 Functional connectivity during encoding predicts subsequent memory

*Mercedes Atienza (UPO)*

#### **13:30 – 15:00 Lunch**

15:00 – 15:30 Modeling synchronization loss in large-scale brain dynamics

*Antoni Pons (UPC)*

15:30 – 16:00 Measuring directional connectivity between EEG sources

*Germán Gómez-Herrero (TTY)*

#### **16:00 - 17:00 Scientific board meeting**

**20:00 Dinner at restaurant “Tiiliholvi”, in Tampere city center**

## Thursday, May 29, 2008

### **WP3: Connectivity topology**

- 10:15 – 10:30 Current status of WP3  
*Gianni Gioacomelli (CNR)*
- 10:30 – 11:15 Phase Synchronization in real data: application to epilepsy and memory formation  
*Anna Pomyalov (Weizmann Institute of Science)*
- 11:15 – 11:45 Precise firing sequences in coupled neural networks  
*Olga Chibirova (UJF)*

### **11:45 – 12:00 Coffee break**

### **WP4: Connectivity dynamics (part 1)**

- 12:00 – 12:15 Current status of WP4  
*Alessandro Villa (UJF)*
- 12:15 – 12:45 Relaying in the brain: a robust mechanism implementing zero time-lag long-distance synchronization of neuronal activity  
*Claudio Mirasso (Universitat de les Illes Balears)*
- 12:45 – 13:15 Effect of feedback strength in coupled spiking neural networks  
*Javier Iglesias (UPC)*
- 13:15 – 13:30 Data analysis web portal  
*Javier Iglesias (UPC)*

### **13:30 – 14:30 Lunch**

### **WP4: Connectivity dynamics (part 2)**

- 14:30 – 15:00 Reconstruction of underlying nonlinear deterministic dynamics embedded in noisy spike train  
*Alessandro Villa (UJF)*

### **WP5: Scale Integration (part 1)**

- 15:00 – 15:30 Current status of WP5  
*Gordon Pipa / Wolf Singer (MPIH)*
- 15:30 – 16:00 Unveiling causal relationships in simultaneous recorded neurophysiological data  
*Raúl Vicente (MPIH)*
- 16:00 – 16:30 **Presentation of IDEAS program (ERC Starting and Advanced Grants)**  
*Pilar López (European Commission)*

**16:45 Bus from the workshop venue to "Siivikkala" sauna**

**21:45 Bus from "Siivikkala" sauna to Keskustori and to Tietotalo**

## Friday, May 30, 2008

### **WP5: Scale integration (part 2)**

10:15 – 10:45 Contour integration in human and monkeys

*Gordon Pipa (MPIH)*

10:45 – 11:15 Synchronizability of coupled logistic maps in the presence of communication delays

*Cristina Masoller (UPC)*

### **11:15 – 11:30 Coffee break**

### **WP 6: Generalisability**

11:30 – 11:40 Current status of WP6

*Jordi Garcia-Ojalvo (UPC)*

11:40 – 12:05 Synchronization Properties of Network Motifs with Delayed Coupling

*Ingo Fisher (Heriot-Watt University)*

12:05 – 12:30 Nonlinear response of a chaotic system as a tool for understanding collective behavior

*Giovanni Giacomelli (CNR)*

### **12:30 – 13:00 Discussion and concluding remarks**

**13:15 Lunch**