



## 1st NeuroMat Young Researchers Workshop

May, 5 to 7, 2015 – São Paulo, SP

### Young Researchers

Aline Duarte, USP, São Paulo  
Andressa Cerqueira, USP, São Paulo  
Bia Ramalho, UFRJ, Rio de Janeiro  
Bruno Monte de Castro, USP, São Paulo  
César Celis Ceballos, USP, Ribeirão Preto  
Estevão Vieira, USP, São Paulo  
Guilherme Ost, USP, São Paulo  
Hjalmar Turesson, ICe, UFRN, Natal  
Julian Tejada, UFS, Sergipe  
Juliana Maia, UFRJ, Rio de Janeiro  
Karina Yaginuma, USP, São Paulo  
Larissa Cristina Moraes, USP, São Paulo  
Leonardo Nagami Coregliano, USP, São Paulo  
Lézio Soares Bueno Júnior, USP, Ribeirão Preto  
Lidiane Souza, UFRJ, Rio de Janeiro  
Lucas Storleman, IMPA, Rio de Janeiro  
Ludmila Brochinni, USP, São Paulo  
Marcel Simis, USP, São Paulo  
Maria Luiza Rangel, UFRJ, Rio de Janeiro  
Michelle F. Miranda, USP, São Paulo  
Osame Kinouchi, USP, Ribeirão Preto  
Rebeca Boltes Cecatto, USP, São Paulo  
Renan Oliveira Shimoura, USP, Ribeirão Preto  
Rodrigo Felipe de Oliveira Pena, USP, Ribeirão Preto  
Thais Filippo, USP, São Paulo  
Thais Terranova, USP, São Paulo

### Organizing Committee

André Frazão, IB, USP  
Antonio Galves, USP, São Paulo  
Antonio Carlos Roque, FFCLRP, USP  
Claudia Domingues Vargas, UFRJ  
João Peschanski, Casper Líbero, São Paulo  
Michelle Miranda, USP, São Paulo  
Lourdes Netto, USP, São Paulo

## TIME SCHEDULE

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Timetable	3 <sup>a</sup> .	4 <sup>a</sup> .	5 <sup>a</sup> .
09.00 – 09.20	Reception and	8	17
09.20 – 09.40	registration	9	18
09.40 – 10.00	"	10	19
10.00 – 10.10	Opening address	short break	short break
10.10 – 10.30	1	11	20
10.30 – 10.50	2	12	21
10.50 – 11.10	3	Coffee break	Coffee break
11.10 – 11.30	Tutorial	Tutorial	Open science and NES
11.30 – 12.00	Tutorial	Tutorial	Open science and NES
12.00- 14.00	Lunch	Lunch	Lunch
14.00 – 14.20	Wikipedia	Wikipedia	22
14.20 – 14.40	Wikipedia	Wikipedia	23
14.40 – 15.00	Wikipedia	Wikipedia	24
15.00 – 15.20	Wikipedia	Wikipedia	Coffee break
15.20 – 15.40	Wikipedia	Wikipedia	Round Table
15.40 – 16.00	Wikipedia	Wikipedia	Round Table
16.00 -16.20	Coffee and movies	Coffee and movies	Round Table
16.20 – 16.40	Coffee and movies	Coffee and movies	Round Table
16.40 – 17.00	4	13	Round Table
17.00 – 17.20	5	14	
17.20 – 17.40	6	15	
17.40 – 18.00	7	16	

### Short Talks

1. A test of hypotheses for random graph distributions. Andressa Cerqueira (USP, SP)
2. Investigation of touch threshold and referred sensation in brachial plexus injuries and surgical repairs. Bia Ramalho Lima (UFRJ, RJ)
3. Spike sorting for interacting neurons. Bruno Monte de Castro (USP, SP)
4. Are there electrically coupled networks of pyramidal cells in the hippocampus and cortex? A computational study. Cesar Celis Ceballos (USP, RP)
5. Analysis of reaction time during pattern learning. Estevão Vieira (USP, São Paulo)
6. Large-scale patterns of neural activity. Hjalmar Turesson (UFRN)
7. Study of neuronal morphology by computational modeling. Julián Tejada (UFSE, SE)
8. Digital database: experience from the Institute of Neurology Deolindo Couto at UFRJ, RJ. Juliana Maia (UFRJ, RJ)
9. A study on the correlation between resting-state functional connectivity and intrinsic neuronal activity of stochastic neural network models. Karina Yaginuma (USP, SP)
10. Families of database schemas for neuroscience experiments. Larissa Moraes (USP, SP)
11. Hippocampal-prefrontal plasticity seems to reverberate in a thalamic-prefrontal loop: what else neuromathematics could tell us? Lézio Soares Bueno-Júnior (USP, RP)
12. Functional connectivity of patients with brachial plexus injury: a resting-state fMRI study. Lidiane Souza (UFRJ, RJ)
13. Retrieving stimulus hidden structure from spike data through context tree modeling. Ludmila Brochini Rodrigues (USP, SP)

14. Neurophysiologic predictors of motor function in stroke. Marcel Simis (USP, SP)
15. Predicting upcoming events occurring in the space surrounding the body. Maria Luiza Rangel (UFRJ, RJ)
16. Tensor partition regression model with applications in imaging biomarker detection. Michelle F. Miranda (USP, SP)
17. Can dynamical synapses produce true self-organized criticality? Osame Kinouchi (USP, RP)
18. Exploring cerebellar inhibition in the motor cortex in stroke patients. Rebeca Boltos Ceccatto (USP, SP)
19. Effect of spike-timing dependent plasticity on functional connectivity and global activity of neocortical network models. Renan Shimoura (USP, RP)
20. A cortical microcircuit model to study structure-activity relationships. Rodrigo F. O. Pena (USP, RP)
21. Electroencephalographic changes in patients with incomplete spinal cord injury, who underwent treatment with robot-assisted gait training. Thais Filippo (USP, SP)
22. Dependency between clinical assessment and kinematic variables assessed with robotic device. Thais Terranova (USP, SP)
23. Epilepsy and sleep: the effects of brain networks - Lucas Stolerman (IMPA, Rio de Janeiro)
24. A continuous time stochastic model for biological neural nets – Leonardo Nagami Coregliano (USP, SP)

## **TUTORIALS**

1. Short Course: Statistical model selection and stochastic modelling of the brain activity. Aline Duarte (USP,SP), Antonio Galves (USP,SP), Guilherme Ost (USP,SP) and Claudia Vargas (UFRJ, RJ)
2. Wikipedia Sessions
3. NeuroMat Movies

## **INVITED TALK**

- Open science and NES – Kelly Braghetto (USP, SP) and Fábio Kon (USP, SP)