



## FAPESP's Center for Neuromathematics

### Workshop on Stochastic Modeling of Neural Nets and Spike Sorting

May 26 to 28, 2015 – NUMEC - USP

#### Participants

Aldana González, Univ. Córdoba, Argentina  
Aline Duarte, USP, São Paulo  
André Frazão Helene, IB, USP  
Andressa Cerqueira, USP, São Paulo  
Antonio Carlos Roque, USP, Ribeirão Preto  
Antonio Galves, USP, São Paulo  
Bia Ramalho, UFRJ, Rio de Janeiro  
Bruno Monte, USP, São Paulo  
César Celis Ceballos, USP, Ribeirão Preto  
Christophe Pouzat, Paris-Descartes, França  
Claudia Domingues Vargas, IBCC-UFRJ, Rio de Janeiro  
Denise Duarte, UFMG, Belo Horizonte  
Diogo Pedrosa, USP, São Paulo  
Estevão Vieira, USP, São Paulo  
Evandro Santos Rocha, USP, São Paulo  
Guilherme Ost, USP, São Paulo  
Jerome Baron, UFMG, Belo Horizonte  
João Peschanski, Casper Líbero, São Paulo  
Jorge Stolfi, IC-UNICAMP, Campinas  
Juliana Maia, UFRJ, Rio de Janeiro  
Karina Yaginuma, USP, São Paulo  
Kelly Braghetto, USP, São Paulo  
Larissa Cristina Moraes, USP, São Paulo  
Ludmila Brochini, USP, São Paulo  
Michelle F. Miranda, USP, São Paulo  
Miguel Natalio Abadi, USP, São Paulo  
Osame Kinouchi, USP, Ribeirão Preto  
Renan Oliveira Shimoura, USP, Ribeirão Preto  
Rodrigo Felipe de Oliveira Pena, USP, Ribeirão Preto  
Sérgio Neuenschwander, ICe, UFRN, Natal  
Sueli dos Santos Rabaça, USP, São Paulo  
Yoshiharu Kohayakawa, USP, São Paulo

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## TIME SCHEDULE

Timetable	Tuesday, May 26	Wednesday, May 27	Thursday, May 28
10:00 – 11:00	Reception and Coffee-break	Talk 3	Talk 5
11:00 – 12:00	Talk 1	Meetings of thematic groups	Meetings of thematic groups
12:00 - 14:00	Lunch	Lunch	Lunch
14:00 – 16:00	Meetings of thematic groups	Meetings of thematic groups	Meetings of thematic groups
16:00 – 16:30	Coffee-break	Coffee-break	Coffee-break
16:30 – 18:00	Meetings of thematic groups	Meetings of thematic groups	Presentations of results of thematic group meetings, evaluation and discussion of future work
18:00 – 19:00	Talk 2	Talk 4	

### Talks

1. Antonio Galves (USP, São Paulo) - Modeling networks of spiking neurons as interacting processes with memory of variable length.
2. Christophe Pouzat (Paris-Descartes) - TBA
3. Antonio Roque (USP, Ribeirão Preto) - Cortical network models: where do we go now?
4. Sergio Neuenschwander (Ice, UFRN, Natal) - Gamma or no gamma: new insights from the visual cortex of the capuchin monkey.
5. Jerome Baron (UFMG, Belo Horizonte) - TBA

### Thematic groups

1. Stochastic cortical network modeling
2. Spike sorting

Participants have to choose one of the two thematic groups, and are expected to actively participate in their meetings. The meeting activities shall include discussions, exchange of expertizes and experiences, and attempts to develop mathematical or computational renderings of the models and processes discussed. At the final session of the workshop, group spokespersons will present the main results obtained and the group evaluation on what has been achieved. This will be followed by a final discussion on the workshop itself and our future work.

Proposed format for the final session:

16:30 – 16:50: presentation of group 1 spokesperson

16:50 – 17:10: presentation of group 2 spokesperson

17:10 – 17:20: final discussion