

5th week: March 27 to 31

Workshop: Networks of spiking neurons

Monday March 27

- 9:00 Welcome coffee
- 9:30-10:30 Markus Diesmann: Simulation of large-scale neural networks.
- 10:30-11:00 Coffee Break
- 11:00-12:00 Sacha van Albada, From structure to activity and back in spiking cortical models
- 15:00-16:00 Ryota Kobayashi: Network inference from time series
- 16:00-16:30 Coffee break
- 16:30-17:30 Shigeru Shinomoto : Searching for neuronal activities involving behavioral changes in animals

Tuesday March 28

Due to the strike in France on March 28, all talks held on this day are cancelled.

Wednesday March 29

- 9:30-10:30 Bruno Cessac: A dynamical system point of view
- 10:30-11:00 Coffee Break
- 11:00-12:00 Massimiliano Tamborrino: ABC for neuronal data
- 14:00-15:00 Rodrigo Cofré: Scalable and accurate method for neuronal ensemble detection in spiking neural networks
- 15:00-16:00 Priscilla Greenwood: Building a stochastic neural circuit of cortical-pulvinar interaction
- 16:00-16:30 Coffee break
- 16:30-17:30 Mauro Piccioni and Emilio De Santis: Statistical model selection in the class of systems of interacting point processes with memory of variable length
- 17:30-19:30 Cocktail and poster session with a short oral introduction: Morgan André, Kadmo de Souza Laxa, Valentin Schmutz, Zoé Agathe-Nerine, Nadia Belmabrouk, Marie Levakova, Francesca Cavallini, Michel Davydov, Flavio Rusch, Nils Eric Greven

Thursday March 30

- 9:30-10:30 Thibaud Taillefumier: Replica-mean field limits of metastable dynamics
- 10:30-11:00 Coffee Break
- 11:00-12:00 Tilo Schwalger : Mesoscopic description of metastability in spiking neural networks
- 14:00-15:00: Antonio C. Roque: Spontaneous activity patterns in networks of nonlinear two-dimensional integrate and fire neurons.
- 15:00-16:00 Étienne Tanré, Spatial and temporal correlations in spikes trains: adaptation or noise with memory?
- 16:00-16:30 Coffee break
- 16:30-17:30 Reinhard Höpfner: On circuits of stochastic Hodgkin-Huxley neurons

Friday March 31

- 9:30-10:30 Céline Duval: Recent results on Hawkes processes.
- 10:30-11:00 Coffee Break
- 11:00-12:00 Guilherme Ost, Neural Coding as a Statistical Testing Problem
- 14:00-15:00 Gilles Louppe: Simulation based network inference.
- 15:00-16:00 Romain Veltz, Theoretical/numerical study of modulated traveling pulses in inhibition stabilized networks
- 16:00-16:30 Coffee break
- 16:30-17:30 Patricia Reynaud-Bouret, Encoding/decoding abilities of the DMS and DLS networks during learning