

Week I: Latin American Summer School in Computational Neuroscience 2017					
Time	Monday 9	Tuesday 10	Wednesday 11	Thursday 12	Friday 13
09:15 - 10:15	Registration and Welcome	"Sustained activity in a spiking cortical network model: mechanisms" Antonio Roque --C203--	"Classification of retinal ganglion cells" María-José Escobar --C203--	"Digital signal processing" Matias Zañartu --C203--	"The Variational Bayes method, a gentle introduction" Nelson Trujillo --C203--
10:15 - 10:45	COFFE BREAK	COFFE BREAK	COFFE BREAK	COFFE BREAK	COFFE BREAK
10:45 - 11:45	"Biophysics of neural excitability" Patricio Orio --C203--	"Stochastic models of ion channel activation" Patricio Orio --C203--	"Computing with Neural Networks" Rubén Herzog --C203--	"Auditory system and psychoacoustics" Matias Zañartu --C203--	Tutorial #5: EEG Pavel Prado / Wael El-Deredy --C203--
11:45 - 12:45	"Sustained activity in a spiking cortical network model: phenomenology" Antonio Roque --C203--	"The retina: a benchmark for brain science" Adrián Palacios --C203--	"The Bayesian Inference framework in a nutshell" Nelson Trujillo --C203--	"Learning in Spiking Neural Networks" María-José Escobar --C203--	Tutorial #6: EEG lab Pavel Prado / Wael El-Deredy --C203--
13:00 - 14:30	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
14:30 - 16:30	Tutorial #1: Python Carolina Saavedra --C203--	Tutorial #2: Neuron Patricio Orio --C203--	Tutorial #3: Brian María-José Escobar --C203--	Tutorial #4: Statistics in Science Pedro Valencia --C203--	Student's Work: project presentation
16:30 - 17:00	Plenary Lecture #1: "A stochastic model for spiking neural networks: analysis and simulations" Antonio Roque --Auditorio Principal--	COFFEE	COFFEE	COFFEE	COFFEE
17:00 - 18:00		Student's Work	Student's Work	Student's Work	Student's Work: project presentation
18:00 - 19:00	Welcome Coctail				

Week II: Latin American Summer School in Computational Neuroscience 2017					
Time	Monday 16	Tuesday 17	Wednesdays 18	Thursday 19	Friday 20
08:30 - 9:00			Workshop registration		
09:15 - 10:15	"Computational network models of spatial working memory" Albert Compte	"Stochastic integrative properties: from single neurons to the network" Alain Destexhe	09:00- 09:40: Laurent Perrinet 09:40- 10:20: Alain Destexhe 10:20- 11:00: Bruno Cessac 11:00- 11:30: Coffee Break 11:30- 12:10: Albert Compte 12:10- 12:50: Tatyana Sharpee	"Maximally informative neural codes" Tatyana Sharpee	"Analysis of neural feature selectivity" Tatyana Sharpee
10:15 - 10:45	COFFEE	COFFEE		COFFEE	COFFEE
10:45 - 11:45	"Computational network models of spatial working memory" Albert Compte	"Stochastic integrative properties: from single neurons to the network" Alain Destexhe		"Sparse optimization in neural computations" Laurent Perrinet	"Active inference: from Bayesian methods to dynamical neural inference" Laurent Perrinet
11:45 - 12:45	"Retinal waves: theoretical basis" Bruno Cessac	"Retinal waves: theoretical basis" Bruno Cessac		Tutorial #7: Network simulation Albert Compte	Student's Work
13:00 - 14:30	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
14:30 - 16:30	Student's Work	Tutorial #4: Statistics in Science Pedro Valencia	14:30- 15:10: Nelson Trujillo 15:10- 15:50: Frédéric Alexandre 15:50- 16:30: Patricio Orio 16:30- 17:00: Coffee Break 17:00- 17:40: Wael El-Deredy	Student's Work	Student's Work
16:30 - 17:00	COFFEE	COFFEE	COFFEE	COFFEE	COFFEE
17:00 - 18:00	Student's Work	Student's Work		Student's Work	Student's Work

Week III: Latin American Summer School in Computational Neuroscience 2017					
Time	Monday 23	Tuesday 24	Wednesdays 25	Thursday 26	Friday 27
09:15 - 10:15	"Brain Computer Interfaces: It's all about attention! Models of visual attention and neural correlates" Matthias Müller	"Neuromodulation: mechanisms and functions" Frédéric Alexandre	"Identification of neuronal ensembles from calcium imaging recordings" Luis Carrillo-Reid		Student's Presentation
10:15 - 10:45	COFFEE	COFFEE	COFFEE	COFFEE	COFFEE
10:45 - 11:45	"Simultaneous two-photon imaging and two-photon optogenetics of neuronal ensembles in awake animals" Luis Carrillo-Reid	"Driving BCIs with flickering lights: What do we have to know about attentional resource allocation and its consequences on steady state visual evoked potentials (SSVEPs)" Matthias Müller	"Attractor memory in the Hippocampus" Emilio Kropff	"Cortical vs Hippocampal attractors" Emilio Kropff	Student's Presentation
11:45 - 12:45	"Modeling the cerebral circuits for prediction of rewards" Frederic Alexandre	"Detecting Brain State Dynamics and State Transitions via Hidden Markov Models I" Wael El Deredy	"Detecting Brain State Dynamics and State Transitions via Hidden Markov Models II" Wael El Deredy		
13:00 - 14:30	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH & Farewell
14:30 - 16:30	Student's Work	Student's Work	Student's Work	Student's Work	
16:30 - 17:00	COFFEE	COFFEE	COFFEE	COFFEE	
17:00 - 18:00	"Searching for the girl on the bicycle: Neural dynamics of sustained feature-based attention in the human brain" Matthias Muller	"Imprinting and recalling cortical ensembles in vivo" Luis Carrillo-Reid	"Spatial navigation in the Hippocampus and Medial Entorhinal Cortex" Emilio Kropff	Student's Work	