

LACONEU2014 Program: Week I					
Time	Monday 13	Tuesday 14	Wednesday 15	Thursday 16	Friday 17
09:15 - 10:15	Reception	"Conductance-based modelling of sensory systems" Patricio Orio -- Salón de Actos (Edif T) --	"Ecology and visual science: The retina as a study case" Adrián Palacios -- Auditorio Principal --	"Dissecting Big Data problems by using Network Theory" Tomás Pérez-Acle -- Auditorio Principal --	"The effect of V1 surround suppression in MT motion perception" María-José Escobar -- Salón de Honor --
10:15 - 10:45	Opening and Welcome	COFFEE	COFFEE	COFFEE	COFFEE
10:45 - 11:45	"ABC of neural excitability" Patricio Orio -- Auditorio Principal --	"Simulating neural networks with BRIAN" Romain Brette -- Salón de Actos (Edif T) --	"Models of spike initiation" Romain Brette -- Auditorio Principal --	"Dissecting Big Data problems by using Network Theory" Tomás Pérez-Acle -- Auditorio Principal --	"Systems and computational neuroscience in the age of Big Data" (Debate) Olivier Marre -- Salón de Honor --
11:45 - 12:45	"Population coding in the retina" Olivier Marre -- Auditorio Principal --	"Shall we build ontologies regarding neuroscience facts or are human sentences sufficient?" Thierry Viéville -- Salón de Actos (Edif T) --	"Bayesian modeling of visual perception" Pascal Mamassian -- Auditorio Principal --	"What are the great biologically plausible algorithms that simulate brain map functionality?" Thierry Viéville -- Auditorio Principal --	"Some history effects in visual perception" (debate) Pascal Mamassian -- Salón de Honor --
13:00 - 14:30	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
14:30 - 16:00	Tutorial #1 Python Carlos Carvajal -- C204 --	Tutorial #2 BRIAN Nelson Cortés -- P411 --	Tutorial #3 Information Theory in Computational Neuroscience Agostina Palmigiano -- C207 --	Tutorial #4 Modelling: Phylosophy and practise Maximiliano Puelma -- P214 --	Student's presentations -- C204 --
16:00 - 16:30	COFFEE	COFFEE	COFFEE	COFFEE	COFFEE
16:30 - 17:30	Plenary Lecture #1 "Computing with spikes" Romain Brette -- Salón de Honor --	Student Work -- P411 --	Plenary Lecture #2 "Neural coding in the visual system: theory, experiments, and clinical applications" Olivier Marre -- Salón de Honor --	Student Work -- P214 --	Student's presentations -- C204 --
17:30 - 18:00					
18:00 - 19:00	Welcome Cocktail				Plenary Lecture #3 "Uncertainty in visual perception" Pascal Mamassian -- Salón de Honor --
19:00 - 20:00					Social Event

LACONEU2014 Program: Week II					
Time	Monday 20	Tuesday 21	Wednesday 22	Thursday 23	Friday 24
09:15 - 10:15	"Neural Networks Dynamics" Bruno Cessac	09:40-10:05: Kathleen Whitlock , "Olfactory development: Making Scents in a changing world" 10:05-10:30: Peter Mombaerts , "Coding olfaction" 10:30-10:55: Patricio Orio , "Different ion channels involved in cold thermosensation: How to put them together?" 10:55-11:20: Andreas Neef , "Population encoding from the perspective of individual neurons" 11:20-11:40: Coffee break 11:50-12:15: Moritz Helmstaedter , "Connectomics: the dense reconstruction of neuronal circuits" 12:15-12:40: Fred Wolf , "Evolution and robustness of large-scale neuronal circuits" 12:40-13:05: John Ewer , "Genetic analysis of a peptidergic neuronal network in <i>Drosophila</i> " 13:05-13:30: Tomás Pérez-Acle , "The Structure and Dynamics of Networks"	"The balanced state: the standard model and beyond" David Hansel	"Optogenetic tools to assess information encoding" Andreas Neef	"Understanding the self-organization of visual cortical architecture" Fred Wolf
10:15 - 10:45	COFFEE		COFFEE	COFFEE	COFFEE
10:45 - 11:45	"Effects of Cellular Homeostatic Intrinsic Plasticity on Dynamical and Computational Properties of Biological Recurrent Neural Networks" Bruno Cessac		"Spike based neural information processing: Applications to vision and speech" Robert Gütiig	"The mechanism of orientation selectivity in rodents" David Hansel	"Computational and experimental methods for dense circuit reconstruction" Moritz Helmstaedter
11:45 - 12:45	Student Work		"Atomistic simulations and interpretations of single molecule experiments" Helmuth Grubmueller	"The complex phase space of balanced spiking neuron circuits" Fred Wolf	Discussion session Guetiig, Hansel, Cessac, Helmstaedter, Wolf "Current challenges in understanding cortical circuits"
13:00 - 14:30	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
14:30 - 16:00	14:30-14:55: Helmut Grubmueller , "May the force be with you: Biological nanomachines at work" 14:55-15:20: F. Danilo González , "Flux of ion in transmembrane nanomachines: K+ channels" 15:20-15:45: Benjamin Kaupp , "Supramolecular organization of rhodopsin in photoreceptor membranes" 15:45-16:10: Carlos González , "Hv channels: a voltage sensor or a permeation pathway to protons?" 16:10-17:10: Jahn Reinhard , "Exocytosis and recycling of synaptic vesicles"	15:10-15:35: Robert Gutig , "Neural processing of continuous sensory streams" 15:35-16:00: Adrián Palacios , "A natural view on retinal neural coding" 16:00-16:25: Andrés Chávez , "Activity dependent modulation of synaptic strength: New Mechanism and Synaptic rules" 16:25-16:50: David Fitzpatrick , "Building cortical representations with experience: Insights from Visual Cortex"	Student work	Student work	Student work
16:00 - 16:30			COFFEE	COFFEE	COFFEE
16:30 - 17:30			Student work	Student work	Student work

LACONEU2014 Program: Week III					
Time	Monday 27	Tuesday 28	Wednesday 29	Thursday 30	Friday 31
09:15 - 10:15	"Emotional learning" Frédéric Alexandre	"Encoding the reinforcement" Frédéric Alexandre	"Decision making as an emerging property of the Cortex basal ganglia loop" Thomas Boraud	"Function of the basal ganglia in birdsong: to theoretical models" Arthur Leblois	Student's presentations
10:15 - 10:45	COFFEE	COFFEE	COFFEE	COFFEE	COFFEE
10:45 - 11:45	"The cortex basal ganglia loop: Anatomy, physiology function" Thomas Boraud	"Function of the basal ganglia in birdsong: from experimental evidence" Arthur Leblois	"Physiopathology and pharmacology of Basal Ganglia" André Garenne	"Modeling mental disorders related to executive dysfunction by a dimensional approach in rodents" Francoise Dellu-Hagedorn	Student's presentations
11:45 - 12:45	"Reinforcement Learning" Nicolas Rougier	"Rodents models of higher cognitive functions: focus on decision-making" Francoise Dellu-Hagedorn	"Advances models for reinforcement learning" Nicolas Rougier	"Physiopathology and pharmacology of the Basal Ganglia: implications for the models" André Garenne	Student's presentations
13:00 - 14:30	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH Farewell
14:30 - 16:30	Student Work	Student Work	Student Work	Student Work	
16:30 - 17:00	COFFEE	COFFEE	COFFEE	COFFEE	
17:00 - 18:30	"Implementation I" Nicolas Rougier & André Garenne	Student Work	"Implementation II" Nicolas Rougier & André Garenne	Student Work	