



Date	Time	Activity
Tue Nov 22	10h00 - 11h00	Reception and Welcome Coffee
	11h00 - 11h40	A stochastic model for neural nets - Modeling neural nets by interacting systems of chains with memory of variable length - E Loecherbach (40')
	11h40 - 11h50	Coffee Break
	11h50 - 12h50	A stochastic model for neural nets - Mean-field analysis and simulation of multi-population networks of stochastic neurons with short-term plasticity - J Stolfi (30') - Twenty projects with Galves-Locherbach stochastic elements - O Kinouchi (20') - Discussion (10')
	13h00 - 14h30	Lunch
	14h30 - 15h30	Working groups
	15h30 - 15h45	Coffee Break
	15h45 - 16h45	A stochastic model for neural nets - Inferring time varying interactions of inhibitory and excitatory kind - RI Oliveira: (40') - Perfect simulation for Bayesian Networks - A Cerqueira (10') - Discussion (10')
	16h45 - 17h00	Coffee Break
	17h00 - 18h00	NeuroMat Scientific Dissemination - Dissemination of the edge of science: NeuroMat's approach and challenges? - FJ da Paixão and J Peschanski (1h)
Wed Nov 23	9h30 - 10h30	NeuroMat Therapeutic Initiatives - Short introduction - A Roque (10') - Mind mapping with words - S Ribeiro (40') - Discussion (10')
	10h30 - 10h50	Coffee Break
	10h50 - 11h30	NeuroMat Therapeutic Initiatives - NeuroMat Parkinson Network (AMPARO): A Helene (25') - Seizure detection and analysis: A SVD-based algorithm - L Stolerman (15')
	11h30 - 11h40	Coffee Break

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	11h40 - 13h00	NeuroMat Technology Transfer - Therapeutic Initiatives - <ul style="list-style-type: none"> <li>- NeuroMat Brachial Plexus Lesion Network (ABRAÇO)</li> <li>- short introduction: C Vargas (10')</li> <li>- Clinical evaluation in brachial plexus lesions (BPL) - JV Martins (10')</li> <li>- Kinematics and BPL - G Freire (10')</li> <li>- The experience of multidisciplinary databasing in traumatic brachial plexus injury - J Maia (10')</li> <li>- Targeting brain plasticity after BPL - F Torres (10')</li> <li>- Structured stochastic processes and functional data analysis for the assessment of motor learning in normal and pathological subjects - N González (10')</li> <li>- Final words and conclusion - L Cohen (15')</li> <li>- Discussion (10')</li> </ul>
	13h00 - 14h30	Lunch
	14h30 - 15h30	Working groups
	15h30 - 15h40	Coffee Break
	15h40 - 16h30	A stochastic model for neural nets <ul style="list-style-type: none"> <li>- On the mathematical consequences of binning spike trains - A Le Ny (50')</li> </ul>
	16h30 - 16h50	Coffee Break
	16h50 - 18h00	NeuroMat Technology Transfer - Computational tools (1h10) <ul style="list-style-type: none"> <li>- What is the desired contribution of NeuroMat NES and DataBase to neuroscience?</li> <li>- Round-table: K Braghetto, MD Gubitoso, J Stolfi (chairman), A Roque and C Vargas.</li> </ul>
Thu Nov 24	9h30 - 10h40	The Statistician Brain <ul style="list-style-type: none"> <li>- Short introduction - A Galves (10')</li> <li>- The statistician brain and the Goalkeeper Game - B Monte (10')</li> <li>- Cluster approach for eeg analysis: predicting upcoming sensorimotor events - ML Rangel: (10')</li> <li>- The goalkeeper game and BPL - CN Soares (10')</li> <li>- F Najman (10')</li> <li>- Final words and conclusion, including plasticity issues: C Vargas (10')</li> <li>- Discussion (10')</li> </ul>
	10h40 - 10h50	Coffee Break
	10h50 - 11h40	A stochastic model for neural nets <ul style="list-style-type: none"> <li>- Simulations of cortical network models made of stochastic spiking neurons - A Roque and N Kamiji (40'+10')</li> </ul>
	11h40 - 12h00	Transfer to Biblioteca Brasileira Mindlin
	12h00 - 13h00	Concerto Brandemburgo IV em sol maior, Cantatas 158 e 51 de JS Bach Coral Audi Coelum e Conjunto de Música Antiga da ECA <ul style="list-style-type: none"> <li>- Sala de Música da Biblioteca Brasileira Mindlin (Rua da Biblioteca s/n, Cidade Universitária)</li> </ul>
	13h00 - 14h30	Lunch
	14h30 - 15h30	Working groups

Date	Time	Activity
	15h30 - 15h40	Coffee Break
	15h40 - 16h40	FAPESP - R Marcondes (1h)
	16h40 - 17h00	Coffee Break
	17h00 - 17h40	A stochastic model for neural nets <ul style="list-style-type: none"> <li>- Synaptic plasticity in a cortical microcircuit model: different scenarios - R Shimoura (10')</li> <li>- Too much noise to sleep: Noise-induced transition from sleep to awake-like state in a spiking network model - R Pena (10')</li> <li>- Subthreshold active conductances shape the EPSPs in cortical neurons - CC Ceballos (10')</li> <li>- Discussion (10')</li> </ul>
Fri Nov 25	9h30 - 10h40	Stochastic modeling and spiking data analysis <ul style="list-style-type: none"> <li>- Initial address: C Pouzat (10')</li> <li>- D Takahashi (20')</li> <li>- Neuronal rhythms: a framework for understanding interactions in the brain - S Neuenschwander (20')</li> <li>- Estimating the connectivity graph of spiking neurons: spike train analysis of simulated data and multi electrode array recordings - LB Rodrigues (10')</li> <li>- Discussion (10')</li> </ul>
	10h40 - 11h00	Coffee Break
	11h00 - 11h50	Stochastic Ising model with plastic interactions - A lambartsev (20') Phase transition for activity statistics in an integrate and fire model with leakage - M Abadi (20') On the central limit theorem in oriented percolation in two dimensions - A Tzioufas (10')
	11h50 - 12h00	Coffee Break
	12h00 - 12h30	A stochastic model for neural nets <ul style="list-style-type: none"> <li>- Estimating the jump rate of a Piecewise Deterministic Markov Process, a model for interacting neurons - P Hodara (10')</li> <li>- Computational modeling of a network of excitatory stochastic spiking neurons in the mean-field limit - G Via (10')</li> <li>- Discussion (10')</li> </ul>
	12h30 - 14h00	Lunch
	14h00 - 16h00	Neuromathematics challenges (2h) <ul style="list-style-type: none"> <li>- Round-table: B Bollobás, M Cassandro, P Ferrari, A Galves (chairman), Y Kohayakawa, E Loecherbach, A Roque, W Szpankowski, C Vargas</li> </ul>