

ICTP-SAIFR Symposium Parallel Research Seminars

ICTP-SAIFR – São Paulo, Brazil

November 6, 2016

Start	End	Session 1: Non-linear systems with applications to biology	
		3rd floor - Computer Lab	
		Speaker	Title
14:00	14:20	Jason Gallas (João Pessoa)	Classical state engineering of entanglement and delayed choice
14:25	14:45	Damian H. Zanette (Bariloche)	Frequency stabilization of synchronized Duffing oscillators
14:50	15:10	Roberto Kraenkel (São Paulo)	Applying complex systems techniques to understand the São Paulo water-supply crisis
15:15	15:45	COFFEE BREAK	
15:50	16:10	Mario Cosenza (Mérida)	Chimera states in systems with global interactions
16:15	16:35	Giovani Vasconcelos (Recife)	Universality Classes of Hierarchical Complex Systems
16:40	17:00	Marcel Clerc (Santiago)	From stationary patterns to spatiotemporal chaotic textures
17:05	17:35	COFFEE BREAK	
17:40	18:00	Hilda Cerdeira (São Paulo)	Collective cohesive motion of chaotic attractors with applications to a flock of starlings
18:05	18:25	Nestor Caticha (São Paulo)	Information Theory and phase transitions in societies
Start	End	Session 2: Condensed matter	
		3rd floor - Room 1	
		Speaker	Title
14:00	14:20	Carlos Aragão de Carvalho (Rio de Janeiro)	Relativistic electron gas: A candidate for nature's left-handed material
14:25	14:45	Eduardo Marino (Rio de Janeiro)	Exciton States in Topological Quantum Matter
14:50	15:10	Carlos Antonio Balseiro (Bariloche)	Dynamically driven systems: the case of graphene
15:15	15:45	COFFEE BREAK	
15:50	16:10	Álvaro Ferraz (Natal)	Mott Physics in the Cuprate Superconductors
16:15	16:35	Viktor V. Dodonov (Brasilia)	Minimal energy Gaussian packets with fixed mean angular momentum and purity
16:40	17:00	Gonzalo Gutierrez (Santiago)	Melting curve of silica at ultra-high pressure: implications for gas giants and super-earth
17:05	17:35	COFFEE BREAK	
17:40	18:00	Karen Hallberg (Bariloche)	Electronic properties in correlated materials: State-of-the-art calculations exploiting quantum information
18:05	18:25	Sergio Rezende (Recife)	New frontiers in spintronics

Start	End	Session 3: Cosmology	
		3rd floor - Room 2	
		Speaker	Title
14:00	14:20	Reinaldo Gleiser (Córdoba)	Linear stability of the Linet - Tian solution with negative cosmological constant
14:25	14:45	Julio Fabris (Vitória)	Variations on the Starobinsky inflationary model
14:50	15:10	Ilya Shapiro (Juiz de Fora)	Anomaly-induced inflation and gravitational stability
15:15	15:45	COFFEE BREAK	
15:50	16:10	Martin Makler (Rio de Janeiro)	Strong gravitational lensing: from pixels to fundamental physics
16:15	16:35	Mario Hamuy (Santiago)	Cosmology from type II Supernovae
16:40	17:00	Jailson Alcaniz (Rio de Janeiro)	Measuring the baryon oscillation scale with SDSS luminous galaxies
17:05	17:35	COFFEE BREAK	
17:40	18:00	Gilberto Kremer (Curitiba)	Self-gravitating systems of ideal gases in the Post-Newtonian approximation
18:05	18:25	Gonzalo Palma (Santiago)	Sound speed of primordial fluctuations in supergravity inflation
Start	End	Session 4: Particle Physics	
		ground floor - NCC Auditorium	
		Speaker	Title
14:00	14:20	Claudio Dib (Valparaiso)	Majorana vs. Dirac Sterile Neutrinos at the LHC
14:25	14:45	Marta Losada (Bogotá)	Pinning down Neutrino Properties
14:50	15:10	Orlando Peres (Campinas)	Can we test large extra dimension models in neutrino experiments?
15:15	15:45	COFFEE BREAK	
15:50	16:10	Alberto Gago (Lima)	Extrapolating regions of Ultra High Energy Cosmic Rays arrival directions from the extraterrestrial neutrinos seen at IceCube
16:15	16:35	Fabio Iocco (São Paulo)	Particle Dark Matter constraints: the effect of Galactic uncertainties
16:40	17:00	Roberto Martinez (Bogotá)	A U(1) anomaly free model for three family of fermions
17:05	17:35	COFFEE BREAK	
17:40	18:00	Orlando Pereyra (Lima)	Asymmetry Forward Backward for the scattering $e^+ e^- \rightarrow u^+ u^-$ in the models 331 and Left Right, in the Z_0' pole
18:05	18:25	Diego Restrepo (Medellín)	Models with radiative neutrino masses and viable dark matter candidates

Start	End	Session 5: Field Theory/General Relativity/Gravitational Waves	
		3rd floor - Room 3	
		Speaker	Title
14:00	14:20	Carmen Núñez (Buenos Aires)	String dualities and geometry
14:25	14:45	Anamaría Font (Caracas)	A flux-scaling string scenario for moduli stabilization and dS vacua
14:50	15:10	Silvio Sorella (Rio de Janeiro)	Non-perturbative aspects of the quantization of Euclidean Yang-Mills theories
15:15	15:45	COFFEE BREAK	
15:50	16:10	Olivier Piguet (Viçosa)	Chern-Simons Gravity in 4D
16:15	16:35	Jorge Zanelli (Valdivia)	Quantum Mechanics as Cosmic Censor
16:40	17:00	Rodolfo Gambini (Montevideo)	Spherically symmetric quantum black holes
17:05	17:35	COFFEE BREAK	
17:40	18:00	Riccardo Sturani (Natal)	The effect of matter structure on the gravitational waveform
18:05	18:25	Rafael Porto (São Paulo)	The Music of the Spheres: From the Early Universe to Black Holes