

Workshop on Density Functional Theory meets Quantum Information Theory (October 27-28, 2017)				
	27/10		28/10	
09:30 - 10:00	Giovanni Vignale	$U(1) \times SU(2)$ gauge invariance made simple for density functional approximation	Belita Koiller	Donors in silicon as qubits and as Quantum Simulators
10:00 - 10:30	Paulo Nussenzeig	Quantum optics and quantum information on chip	Marcos César de Oliveira	Staggered Quantum Walks
10:30 - 11:00	Celso Villas Boas	Electromagnetically Induced Transparency and applications in Quantum Information Theory	Marcelo Terra Cunha	Coloured-graph approach for contextuality and nonlocality
11:00 - 11:30	COFFEE BREAK		COFFEE BREAK	
11:30 - 12:00	Raimundo Rocha dos Santos	Dipolar extended Fermi-Hubbard Model in two-dimensions	Mariana Mieko Odashima	Time-dependent resonant tunneling transport via nonequilibrium Green's functions
			Krissia de Zawadzki	Symmetries in finite quantum systems: the role of boundary conditions
12:00 - 12:30	Christian Schilling	Influence of exchange symmetry beyond Pauli's exclusion principle	Simone Marocci	Improving DFT functionals by comparing the correlation distance of many-electron systems: A progress report on an ongoing attempt
			Closing Remarks	
12:30 - 12:45	Wilton Kort-Kamp	Topological photonics in the graphene family	LUNCH	
12:45 - 13:00				
13:00 - 14:00	LUNCH			
14:00 - 14:30	Diego Guedes Sobrinho	Dynamics and Stability of Gold Nanoclusters at Finite-Temperature	Post-Workshop on Condensed Matter Physics	
14:30 - 15:00	Lauro Tomio	Soliton dynamics in Bose-Einstein condensates: field-induced dipole moments and spin-orbit coupling		
15:00 - 15:30	André Malvezzi	Automatic classification of quantum phases via machine learning		
15:30 - 16:00	Krissia de Zawadzki	Can DFT handle the Kondo problem?		
16:00 - 16:30	COFFEE BREAK			
16:30 - 17:00	Stefano Pittalis	Fermionic correlations as metric distances: a useful tool for materials science		
17:00 - 17:30	Roberto Serra			
17:30 - 17:45	Gentil Dias de Moraes Neto	Steady many-body entanglements in dissipative systems		
17:45 - 18:00	Carlos Ivan Henaos Osorio	Charging capacity of a quantum battery using thermal energy		
18:00 - 18:45	Discussion session			