

Workshop on Strong Electron Correlations in Quantum Materials: Inhomogeneities, Frustration, and Topology (Aug. 14-18, 2018)

	Tuesday, Aug. 14	Wednesday, Aug. 15	Thursday, Aug. 16	Friday, Aug. 17	Saturday, Aug. 18
8:30 – 9:30	Registration				
9:30 – 10:10	Marino	Costa	Morais-Smith	Micklitz	Andrade
10:10 – 10:50	Granado	Santos	Pereira	Narayanan	Soh
10:50 – 11:10	Coffe Break				
11:10 – 11:50	Popovic	Paiva	Garcia	Aeppli	Fiore
11:50 – 14:00	Lunch				11:50- 12:00 Closing
2:00 – 2:40	Ku	Colloquium	Civelli	Vieira	
2:40 – 3:20	Ghosal	(Aeppli)	Aguiar	Dobrosavljevic	
3:20 – 3:40	Coffe Break				
3:40 – 4:20	Rowley	Poster	Rademaker	Miranda	
4:20 – 5:00	Avila		Vafek	Vojta	
5:00 – 5:40	Discussions				

PLENARY TALKS:

Gabriel Aeppli (Paul Scherrer Institute, Switzerland) [Many-body localization in a dense interacting quantum system](#)

Gabriel Aeppli (Paul Scherrer Institute, Switzerland) [IFT-Colloquium: The next life of silicon](#)

Maria Carolina Aguiar (UFMG, Brazil) [Correlation-Driven Lifshitz Transition at the Emergence of the Pseudogap Phase in the Two-Dimensional Hubbard Model](#)

Eric Andrade (IFSC-USP, Brazil): [Cluster-glass phase in disordered XY antiferromagnets pyrochlores](#)

Marcos Avila (UFABC, Brazil) [Magnetism and superconductivity in the intermetallic series RNiSi₃ \(R=Y, Gd-Lu\)](#)

Marcello Civelli (Université Paris-Sud, France) [Unconventional high-energy Cooper pairing in cuprates: a Cluster Dynamical Mean Field Theory Perspective](#)

Natanael de Carvalho Costa (IF-UFRJ, Brazil): [The nature of charge-density wave: A Quantum Monte Carlo Study](#)

Vlad Dobrosavljević (National High Magnetic Field Lab & Florida State University, USA): [Approaching Disorder-Driven Metal-Insulator Transitions in Deformable Lattices: the Mystery of Mooij Correlations](#)

Carlos Fiore (IF-USP, Brazil): [Temporal disorder in discontinuous non-equilibrium phase transitions: general results](#)

Fernando Garcia (USP, Brazil): [The disordered double perovskite BaTi_{1/2}Mn_{1/2}O₃ as new Spin Liquid candidate: results from heat capacity and \$\mu\$ SR experiments](#)

Amit Ghosal (Indian Institute of Science Education and Research Kolkata, India) [Superconductivity in a disordered vortex lattice](#)

Eduardo Granado (UNICAMP, Brazil) [Electronic nematic order and fluctuations in Fe pnictides: a Raman scattering and synchrotron x-ray diffraction study](#)

Wei Ku (Shanghai Jiao Tong University, China) [Non-Fermi liquid scattering against emergent Bose liquid: manifestations in the kink and other exotic quasiparticle behaviors in the normal-state cuprate superconductors](#)

Eduardo Marino (UFRJ, Brazil) [The Superconducting Phase Diagram of High-T_c Cuprates](#)

Tobias Micklitz (CBPF, Brazil) [Quantum critical walk at a topological Anderson localization transition](#)

Eduardo Miranda (UNICAMP, Brazil) [Emergent symmetry and transport in disordered quantum chains](#)

Rajesh Narayanan (Indian Institute of Technology Madras, Chennai, India) [Spin selective Metal-Insulator transition in two dimensions.](#)

Thereza Paiva (UFRJ, Brazil) [Spatial Charge and Spin Correlations in the 2D Fermi-Hubbard Model including a Zeeman field](#)

Rodrigo Pereira (International Institute of Physics-UFRN, Brazil) [Quantum spin-orbital liquids in \$j=3/2\$ systems](#)

Dragana Popovic (National High Magnetic Field Laboratory, USA) [Phase diagram of underdoped cuprates in a magnetic field: A unified perspective](#)

Louk Rademaker (Perimeter Institute, Canada) [Charge-transfer insulation in twisted bilayer graphene](#)

Raimundo R. Santos (UFRJ, Brazil) [Mott phase in the dipolar extended Hubbard model on a square optical lattice](#)

Cristiane Morais Smith (Utrecht University, The Netherlands) [Thermodynamic description of topological insulators: the search for universal behaviour](#)

Oskar Vafek (National High Magnetic Field Laboratory, USA): [Symmetry, maximally localized Wannier states, and low energy model for the twisted bilayer graphene narrow bands](#)

Andre P. Vieira (USP, Brazil): [Many-body localization and emergent dimerization in disordered quantum systems](#)

Thomas Vojta (Missouri University of Science and Technology, USA) [Fate of the Amplitude \(Higgs\) Mode at a Disordered Quantum Phase Transition](#)

Stephen Rowley (Cavendish Laboratory, University of Cambridge, UK) [Ultra-strong electron pairing by hybrid polar modes in ferroelectric superconductors](#)

POSTER:

Michael Cabrera Baez (UNICAMP, Brazil): [Growth and characterization of i-Gd-Cd quasicrystals and its approximant \$GdCd_{6}\$](#)

Karla Kariny Ferreira Barbosa (UFABC, Brazil): [Structural and magnetic properties of antiferromagnetic \$Gd_3Ir_4Sn_{13}\$](#)

Jesus David Cifuentes (IF-USP, Brazil): [Indirect exchange and Kondo interactions in Majorana-double quantum dot systems](#)

Henrique Fabrelli Ferreira (IF-USP, Brazil): [TBA](#)

Deisy Viviana Aristizabal Giraldo (Universidad de Antioquia-Medellin, Colombia): [Structural and electronic properties of the new superconductors \$YNiSi_3\$ and \$LuNiSi_3\$](#)

Leonardo Leite (UNICAMP, Brazil): [Entanglement entropy of two-dimensional dimerized Heisenberg antiferromagnets](#)

Willian Massashi Hisano Natori (IFSC-USP, Brazil): [Stability of \$SU\(4\)\$ symmetric spin-orbital liquids on the hyperhoneycomb lattice](#)

Dimitrios Voliotis (IFSC-USP, Brazil): [TBA](#)