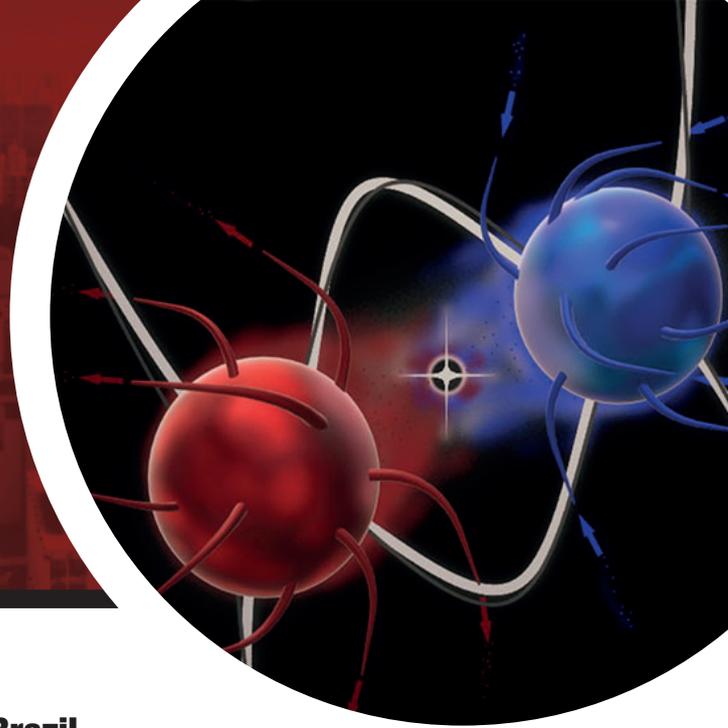


WORKSHOP ON STRONG ELECTRON CORRELATIONS IN QUANTUM MATERIALS: INHOMOGENEITIES, FRUSTRATION, AND TOPOLOGY



June 19-23, 2023

at Instituto de Física Teórica - UNESP, São Paulo, Brazil

CONFIRMED SPEAKERS

Gabriel Aeppli (Paul Scherrer Institute, Switzerland)
Carol Aguiar (UFMG, Brazil)
Vanildo S. Carvalho (UFG, Brazil)
Claudio Chamon (Boston University, USA)
Mucio Continentino (CBPF, Brazil)
Wei Chen (PUC-Rio, Brazil)
Mucio Continentino (CBPF, Brazil)
Luis Gregório Dias (USP, Brazil)
Vlad Dobrosavljevic (NHMFL & FSU, USA)
Rafael Fernandes (University of Minnesota, USA)
Rebecca Flint (Iowa State University and Ames National Laboratory, USA)
Rafael S. Freitas (USP, Brazil)
Elena Gati (Max Planck Institute for Chemical Physics of Solids, Germany)
Wei Ku (Shanghai Jiaotong University, China)
Caio Lewenkopf (UFF, Brazil)
Tobias Micklitz (CBPF, Brazil)
Eduardo Miranda (UNICAMP, Brazil)
Rajesh Narayanan (IIT-Madras, India)
William Natori (Institute Laue Langevin, France)
Eduardo Novais (Universidade Federal do ABC)
Thereza Paiva (UFRJ, Brazil)
Rodrigo Pereira (IIP & UFRN, Brazil)
Dragana Popovic (NHMFL & FSU, USA)
Srinivas Raghu (Stanford, USA)
Daniel Reyes (Instituto Militar de Engenharia, Brazil)
Judit Romhányi (UC Irvine, USA)
Raimundo Rocha dos Santos (UFRJ, Brazil)
Eduardo Silva-Neto (Yale, USA)
Y. Soh (Paul Scherrer Institute, Switzerland)
Thais Victa Trevisan (UC Berkeley, USA)
Oskar Vafek (NHMFL & FSU, USA)
Matthias Vojta (TU-Dresden, Germany)
Thomas Vojta (Missouri S&T, USA)

The last decades have seen much progress in Condensed Matter Physics. On one hand, there were experimental discoveries of several novel materials displaying exotic behavior, such as unconventional superconductivity, fractional statistics, and topologically nontrivial phases. On the other hand, there was tremendous progress in engineering artificial systems like optical lattices, Rydberg atoms, and Floquet systems, establishing the field of Quantum Simulators. Besides being a proxy to interesting Condensed Matter systems, the Quantum Simulators also have access to the dynamics of the system, bringing exciting new possibilities and challenges to study many-body systems with an unprecedented degree of control. Overall, many of the most interesting properties arise from strong interactions between their constituents, with growing evidence of the key role played by inhomogeneities, frustration, and topological aspects of the matter.

In this workshop, we bring together experts working in this challenging and rapidly evolving field of Strongly Correlated Electronic Systems, to present their experimental and theoretical progress. This will allow for a vigorous exchange of ideas and hopefully stimulate exciting new collaborations between the participants.

Topics of the workshop include:

1. In and out of equilibrium disordered metals and insulators
2. Frustrated magnets, spin liquids, and topological insulators
3. Correlated and topological superconductors

There is no registration fee.

**Registration deadline:
May 7, 2023**

**Online registration and more information:
<https://www.ictp-saifr.org/qm2023>**

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