



**ICTP  
SAIFR**

International Centre  
for Theoretical Physics  
South American Institute  
for Fundamental Research

# WORKSHOP ON LONG RANGE INTERACTIONS AND SYNCHRONIZATION

**May 28-31, 2018**

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

## SPEAKERS:

### General introduction, tools and methods

Celia Anteneodo (PUC-Rio, Brazil)  
Mustansir Barma (TCIS, India)  
Julien Barré (U. d'Orléans, France)  
Alessandro Campa (INFN Roma, Italy)  
Shamik Gupta (Ramakrishna M.V.U., India)  
Michael Kastner (Stellenbosch U., South Africa)  
Arkady Pikovsky (U. Potsdam, Germany)  
Tarcisio M. Rocha Filho (UnB, Brazil)  
Stefano Ruffo (SISSA, Italy)

### Applications & Experiments

Romain Bachelard (UFSCar, Brazil)  
Hughes Chaté (CEA, France)  
Misha Chertkov (Los Alamos National Lab, USA)  
Hiroaki Daido (Osaka Prefecture U., Japan)  
Robin Kaiser (U. Nice, France)  
Erik A. Martens (T.U. Denmark)  
Giovanna Morigi (Saarland U., Germany)  
Antonio Politi (U. Aberdeen, UK)  
Francisco Rodrigues (USP, Brazil)

Studies of synchronization in non-linear dynamical systems and of the physics of long-range interacting statistical systems have been pursued in parallel, albeit with not much overlap, by the communities of dynamical and statistical physicists.

This workshop aims to bring together statistical physicists and dynamical physicists to discuss common aspects of long-range and synchronizing systems, addressing both fundamental techniques (large deviations theory, kinetic theory, dimensional reduction, equilibrium and nonequilibrium statistical physical aspects, etc) and applications (networks, light-matter interactions, etc). There is no registration fee.

**Registration deadline: March 30, 2018**

**Online registration form and information:  
[www.ictp-saifr.org/LRIS18](http://www.ictp-saifr.org/LRIS18)**



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## ORGANIZERS

**S. Gupta (Ramakrishna M.V.U.)  
R.P.M. Bachelard (UFSCar)  
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