



ICTP | International Centre for Theoretical Physics
SAIFR | South American Institute for Fundamental Research

Campus of IFT-UNESP - São Paulo, Brazil

NOVEMBER 16-18, 2020

ICTP-SAIFR SCHOOL ON APPLICATIONS OF NONLINEAR SYSTEMS TO SOCIO-ECONOMIC COMPLEXITY

Application deadline: **Oct. 4, 2020**

Online application and more information:
www.ictp-saifr.org/sociophys20

Complex socio-economic phenomena, such as financial crises, epidemics, crime propagation and opinion formation can be studied through complexity concepts, mathematical modelling and simulations. The school aims to provide interdisciplinary training to PhD students and postdoctoral researchers. Lectures will cover theoretical and computational aspects of complex systems and applications to social research.

Lecturers

Pablo Balenzuela (U. de Buenos Aires, Argentina): *Multi-agent models in complex networks*

Marcelo Kuperman (I. Balseiro-Bariloche, Argentina): *Introduction to evolutionary game theory*

Cristina Masoller (U. Politècnica de Catalunya, Spain): *Time series analysis*

Viktoriya Semeshenko (U. de Buenos Aires, Argentina): *Economic and financial networks: models and analysis*

The application of techniques of statistical (and other areas of) physics to understand the dynamics of social systems is currently one of the hottest topics in the study of complex systems. The so-called Sociophysics has attracted the attention of a large number of scientists from areas such as physics, computer science, and mathematics, as well as the humanities.

This meeting will bring together physicists and other scientists from all over the world to focus on open issues in social modelling and to identify the new directions in which this interdisciplinary field is evolving.

Invited Speakers

Alex Arenas (U. Rovira i Virgili, Spain)

Pablo Balenzuela (U. de Buenos Aires, Argentina)

Guillaume Deffuant* (Lisc, France)

Silvio Ferreira (UFV, Brazil)

Jose Fernando Fontanari (IFSC/USP, Brazil)

Serge Galam (SciPol, France)

José Roberto Iglesias (UNILA, Brazil)

Marcelo Kuperman (CAB, Bariloche, Argentina)

Fabiana Laguna (CAB, Bariloche, Argentina)

Francisco WS Lima (UFPI, Brazil)

Vittorio Loreto* (Sapienza U. di Roma, Italy)

Alexandre Martinez (USP-RP, Brazil)

Hernán Makse (City College, CUNY, USA)

Maxi San Miguel (IFISC, UIB-CSIC, Spain)

Mauro Mobilia* (U. of Leeds, UK)

Yamir Moreno* (U. of Zaragoza, Spain)

Andrea Rapisarda (U. of Catania, Italy)

Fabiano Ribeiro (UFLA, Brazil)

Viktoriya Semeshenko (IIEP, Argentina)

José Soares-Andrade Jr (UFC, Brazil)

Katarzyna Sznajd-Weron (Wrocław U., Poland)

Raul Toral (IFISC, UIB-CSIC, Spain)

Juan Alejandro Valdivia (U. de Chile, Chile)

*to be confirmed

NOVEMBER 19-21, 2020

ICTP-SAIFR WORKSHOP ON SOCIOPHYSICS: SOCIAL PHENOMENA FROM A PHYSICS PERSPECTIVE

Application deadline: **Oct. 4, 2020**

Online application and more information:
www.ictp-saifr.org/wsociophys20

There is no registration fee and limited funds are available for travel and local expenses.



IFT - UNESP

ORGANIZERS 1st week

Pablo Balenzuela (U. de Buenos Aires, Argentina)

Hilda Cerdeira (IFT-UNESP, Brazil)

Cristina Masoller (U. Politècnica de Catalunya, Spain)

ORGANIZERS 2nd week

Celia Anteneodo (PUC-Rio, Brazil)

Marcos Gomes Eleuterio da Luz (UFPR, Brazil)

Nuno Crokidakis (UFF, Brazil)

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