



The Abdus Salam
International Centre
for Theoretical Physics



Hands-On Research in Complex Systems School

Description:

The School provides early stage researchers with interactive experiences of hands-on research involving table-top experiments with computer data acquisition and modeling. Participants will also take part in professional development of improved scientific communication in English.

MORE DETAILS:

An intensive programme of laboratory experiments, mathematical modeling, and lectures gives participants immersive experiences with complex systems in the physical and life sciences. Additionally, participants will present their own research in talks and posters with extensive faculty feedback to enhance the presentation quality. The faculty are eminent scientists who have conducted frontier table-top research published in leading international scientific journals.

TOPICS:

- Biological Physics
- Optical Physics
- Modeling of Epidemics
- Soft Matter Physics
- Turbulence/Flow Instabilities
- Machine Learning in Table-Top experiments
- Modeling in MATLAB - Molecular Dynamics
- Maker Movement Techniques—3D Printing, Field Programmable Gate Arrays
- Computational Modeling

SPEAKERS:

F. FENTON, Georgia Institute of Technology, USA
A. GUMEL, University of Maryland, USA
J. MOLLOY, University of Cambridge/ University of Trieste, UK/ITALY
M. POLIN, Mediterranean Institute for Advanced Studies, SPAIN
E. SANDER, George Mason University, USA
K-Î TÔ, Okinawa Institute of Science and Technology, JAPAN



2 - 13 December 2024



Trieste, Italy



**Deadline:
8 July 2024**

DIRECTORS:

P. CICUTA, University of Cambridge, UK
M.L. CRESPO, ICTP
E. KOSTELICH, Arizona State University, USA
T. PILIZOTA, University of Edinburgh, UK
M.F. SCHATZ, Georgia Institute of Technology, USA
M.D. SHATTUCK, The City College of New York, USA

SCIENTIFIC CONTACT:

M. L. CRESPO, ICTP, ITALY

FURTHER INFORMATION:

E-mail: smr3986@ictp.it



Web: <https://indico.ictp.it/event/10525/>

Female scientists are encouraged to apply.

GRANTS:

A limited number of grants are available to support the attendance of selected participants, with priority given to participants from developing countries. There is no registration fee.

