Conference on Time Crystals

8 - 10 March 2021
An ICTP Virtual Meeting
Trieste, Italy

Further information:
http://indico.ictp.it/event/9504/
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Landau's idea of classifying phases of matter in terms of symmetry breaking is a cornerstone of modern physics.

Can time-translation invariance be spontaneously broken? The possible existence of time crystals was first addressed by Wilczek for quantum many-body systems, and together with Shapere for classical systems, launching an intense activity both theoretically and experimentally.

Despite their conceptual simplicity and apparent similarity to ordinary crystals, they were experimentally observed only three years ago, 80 years after the Landau theory of symmetry breaking.

The field is continuing to grow, fed with new theoretical ideas and experimental works. The main goal of the conference is to bring together the most active groups in the field to exchange their latest results.

Topics:

- discrete time crystals
- continuous time-translation symmetry breaking
- dissipative time crystals
- time crystals in classical systems
- condensed matter physics in time crystals

Directors:

R. FAZIO, ICTP Trieste, Italy
K. SACHA, Jagiellonian University in Krakow, Poland

Local Organizer:

R. FAZIO, ICTP

Speakers:

V. ELTSOV, Aalto University, Finland
L. GUO, MPI for the Science of Light, Germany
P. HANNAFORD, Swinburne University of Technology, Australia
A. HEMMERICH, University of Hamburg, Germany
V. KHEMANI, Stanford University, USA
A. KOSIOR, MPI for Complex Systems, Germany
O. KYRIIENKO, University of Exeter, UK
I. LESANOVSKY, Nottingham University, UK
W.V. LIU, University of Pittsburgh, USA
J. MARINO, Mainz University, Germany
A. NUNNENKAMP, Cambridge University, UK
A. RUSSOMANNO, MPI for Complex Systems, Germany
A. SANPERA, Universitat Autonoma Barcelona, Spain
M. SCHIRO, College de France, France
M. SEGEV, Technion, Israel
A. SHAPERE, University of Kentucky, USA
H. TAHERI, University of California Riverside, USA
M. UEDA, University of Tokyo, Japan
P. VAN DER STRATEN, Utrecht University, The Netherlands
F. WILCZEK, MIT, USA
N. YAO, UC Berkeley, USA
O. ZILBERBERG, ETH Zurich, Switzerland

How to apply:

Online application:
http://indico.ictp.it/event/9504/

Female scientists are encouraged to apply.

Registration:

There is no registration fee

Deadline:

15 February 2021

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