

# School and Conference on Complex Quantum Systems out of Equilibrium in Many-Body Physics and Beyond



**27 May – 7 June 2019**  
**Yerevan, Armenia**

Further information:  
<http://indico.ictp.it/event/8687/>  
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[complex.quantum2019@gmail.com](mailto:complex.quantum2019@gmail.com)

The first week of this activity (May 27-31) will consist of introductory lectures aimed at graduate students, postdocs, and junior researchers. Topics include far from equilibrium physics, many-body coherent dynamics, Anderson and many-body localization, and quantum information processing from many-body physics perspective.

In the second week (June 3-7), we will have conference-style talks on these subjects as well as on a broader array of topics at the forefront of modern research in condensed matter physics and related areas. Additional subjects include quantum gases, superconductivity and superconducting qubits, topological states of matter, integrable systems, low-dimensional physics, disordered systems, quantum thermodynamics, driven and driven-dissipative dynamics etc.

## First Week Lecturers:

I. ALEINER (\*), Columbia University, USA  
A. KAMENEV, University of Minnesota, USA  
V. KRAVTSOV, ICTP, Italy  
D. PETROSYAN, Institute of Electronic Structure & Laser, Greece  
M. RIGOL, Penn State University, USA  
D. SHAHAR, Weizmann Institute, Israel  
V. SMELYANSKY, Google, USA  
M. WEIGEL (\*), Coventry University, UK

## Second Week Speakers:

AL. ABANOV, Stony Brook University, USA  
N. ANDREI, Rutgers University, USA  
S. J. AKHTARSHENAS, Ferdowsi University of Mashhad, Iran  
G. BIROLI, CEA Saclay, France  
M. CAMPISI, University of Florence, Italy  
J.-S. CAUX(\*), University of Amsterdam, Netherlands  
V. CHEINAOV, Leiden University, Netherlands  
A. CHUBUKOV, University of Minnesota, USA  
S. DENISOV, Augsburg University, Germany  
K. EFETOV, Bochum University, Germany  
L. FAORO, University of Wisconsin-Madison, USA  
S. FLACH, IBS Daejeon, South Korea  
V. GALITSKII, University of Maryland, USA  
D. GANGART, University of Birmingham, UK  
M. GERSHENSON, Rutgers University, USA  
T. GIAMARCHI, University of Geneva, Switzerland  
L. GLAZMAN, Yale University, USA  
V. GRITSEV, University of Amsterdam, Netherlands  
V. GURARIE, University of Colorado Boulder, USA  
K. HOVHANNISYAN, Aarhus University, Denmark  
L. IOFFE, University of Wisconsin-Madison, USA  
M. KISELEV, ICTP, Italy  
G. KURIZKI, Weizmann Institute, Israel  
S. MUKERJEE, Indian Institute of Science, India  
V. OGANESYAN, City University of New York, USA  
M. ORTUNO, Murcia University, Spain  
N. PERKINS, University of Minnesota, USA  
A. REZAKHANI, Sharif University, Iran  
M. RIGOL, Penn State University, USA  
Y. RUBO, UNAM, Mexico  
G. SHLYAPNIKOV, LPTMS, Orsay, France  
T. SEDRAKYAN, Amherst University, USA  
V. YUDSON, Higher School of Economics, Russia

(\* ) to be confirmed

## How to apply:

Online application:  
<http://indico.ictp.it/event/8687/>

Female students and 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.

## Directors:

**B. ALTSHULER**  
Columbia University, USA  
**R. FAZIO**  
ICTP, Italy  
**V. GASPARYAN**  
California State University, Bakersfield, USA  
**I. LERNER**  
School of Physics, University of Birmingham, UK  
**E. YUZHANSKYAN**  
Rutgers University, USA

## Local Organizers:

**N. ANANIKIAN**  
Yerevan Physics Institute, Armenia  
**A. ALLAHVERDYAN**  
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## ICTP Scientific Contact:

**R. FAZIO**  
ICTP, Italy

## Deadline:

**28 February 2019**



**A.N.S.E.F.**  
The Armenian National Science & Education Fund

VolkswagenStiftung



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