

# Conference on Taming Non-Equilibrium Systems: from Quantum Fluctuation to Decoherence



**29 July - 1 August 2019**  
**Trieste, Italy**

Further information:  
<http://indico.ictp.it/event/8705/>  
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The workshop aims at reviewing the state-of-the-art in non-equilibrium systems affected by (quantum) fluctuations and decoherence mechanisms bringing together scholars of international calibre active in diverse research communities, such as condensed matter, linear and non-linear optics, cold atoms and quantum information.

## Description:

The workshop aims at reviewing the state-of-the-art and proposed developments in the theoretical description and experimental control of decoherence and fluctuations in an ample set of physical contexts. One of the aims of the workshop is to identify similarities and differences between decoherence in model systems, such as optomechanical cavities and open quantum systems, and non-equilibrium phenomena in complex materials.

The goal is to set the roadmap to develop a universal view on how decoherence processes and quantum fluctuations govern the non-equilibrium dynamics in different systems.

The program will also include a number of selected contributed talks. A poster session will be organized.

The "European research council" is sponsoring through the projects:

- INCEPT (Grant Number: 677488)
- UfastU (Grant Number: 716648)

## Topics:

- Quantum materials
- Open quantum systems
- Non equilibrium quantum systems and processes
- Optomechanical systems
- Decoherence
- Cold Atoms

## How to apply:

Online application:  
<http://indico.ictp.it/event/8705/>

## 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:

**M. ECKSTEIN**  
University of Erlangen  
**D. FAUSTI**  
University of Trieste, Elettra Sincrotrone Trieste S.c.p.a.,  
University of Princeton  
**N. KIESEL**  
University of Vienna  
**M. PATERNOSTRO**  
Queen's University Belfast

## Local Organizer:

**R. FAZIO, ICTP**

## Invited Speakers:

**S. CUNDIFF**, University of Michigan (USA)  
**A. RUBIO**, Max Plank Hamburg (Germany)  
**F. MARQUARDT**, Max Plank Institute for Quantum Light, Erlangen (Germany)  
**P. BARKER**, UCL (UK)  
**C. CIUTI**, Paris Diderot (France)  
**D. JAKSCH**, University of Oxford (UK)  
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**P. WERNER**, University of Friburg (Switzerland)  
**E. DEMLER**, University of Harvard (USA)  
**A. LEITENSTHORFER**, University of Konstanz (Germany)

## Deadline:

**31 May 2019**



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