

The Abdus Salam **International Centre** for Theoretical Physics



Joint ICTP-WE Heraeus **Conference on Non-equilibrium Quantum Statistical Physics**

Description:

The main goal of this satellite meeting is to bring together experts working in different areas of quantum physics (stat-phys, quantum information, cold-atom and ion-trap experiments, tensor networks) with the common interest in non-equilibrium quantum statistical physics.

MORE INFORMATION:

The non-equilibrium behavior of many-body quantum systems constitutes a focal point in current theoretical and experimental research. Numerous intriguing concepts continue to emerge frequently. Recent noteworthy developments include the introduction of quantum circuits to give access to ergodic and integrable dynamics, the discovery of measurement induced phase transition, the use of randomized measurements to measure experimentally the entanglement dynamics in ion traps and cold atoms, the development of generalized hydrodynamics, the anomalous relaxation due to quantum scars and localization.

TOPICS:

- Non equilibrium guantum statistical mechanics
- Quantum circuits
- Entanglement dynamics
- Quantum chaos

This is a satellite conference of StatPhys29 https://statphys29.org/

SPEAKERS:



- S. Pappalardi, University of Cologne, Germany
- A. Gambassi, SISSA, Italy
- T. Prosen, University of Ljubljana, Slovenia

M. C. Bañuls, MPQ, Germany J. Chalker, Oxford University, UK A. Chenu, University of Luxembourg P.W. Claeys, MPQ, Germany A. Dhar, TIFR Bangalore, India L. S. Diehl, University of Cologne, Germany O. Dmytruk, École Polytechnique, France J. Garrahan, University of Nottingham, UK W.W.Ho, NUS, Singapore A. Kamal, Yale University, USA

K. Klobas, University of Birmingham, UK Z. Lenarcic, University of Ljubljana, Slovenia A. Lerose, University of Oxford, UK M. Takashi, RIKEN, Japan S. Murciano, University Paris-Saclay, France G. Mussardo, SISSA, Italy **Z. Papić**, University of Leeds, UK D. Roy, RRI Bangalore, India C. Roos, University of Innsbruck, Austria F. Surace, Caltech University, USA

LOCAL ORGANISER: A. Scardicchio, ICTP, Italy

FURTHER INFORMATION:



E-mail: smr4090@ictp.it

Web: http://indico.ictp.it/event/10855/

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.





WILHELM UND ELSE **HERAEUS-STIFTUNG**

