Emergent Hydrodynamics in Integrable Quantum Many-body Systems and Beyond

An ICTP Virtual Meeting
8, 10 and 12 June 2020
Trieste, Italy

Further information:
http://indico.ictp.it/event/9377/
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Hydrodynamics plays a crucial role in many branches of physics. It can be regarded as an effective field theory for the dynamics of slow conserved modes of many-body systems that emerge at large scales, describing the evolution from local to global equilibrium. Recently, the notion of hydrodynamics was generalized to describe the behavior of quantum integrable systems that are characterized by an infinite number of conserved quantities. This workshop will gather a core group of outstanding young scientists, and will aim to set new directions for future research in the field.

Topics:

- Emergence of GHD
- Diffusion and higher-order corrections
- Anomalous transport
- Hydrodynamics of integrability breaking
- Low temperature hydrodynamics, quantum corrections
- Bose gas experiments
- Entanglement dynamics
- Cellular automata

Directors:

B. BERTINI, University of Ljubljana
B. DOYON, King's College London
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Local Organizer:

M. DALMONTE, ICTP

Speakers:

A. BASTIANELLO, Univ. of Amsterdam, The Netherlands
V. BULCHANDANI, UC Berkeley, USA
A. CORTES-CUBERO, Univ. of Amsterdam, The Netherlands
J. DE NARDIS, Ghent University, Belgium
J. DUBAIL, Université de Lorraine, France
M. FAGOTTI, Université Paris-Saclay, France
S. GOPALAKRISHNAN, CUNY, USA
K. KLOBAS, University of Ljubljana, Slovenia
M. MEDENJAK, ENS Paris, France
F. MØLLER, Technische Universität Wien, Austria
L. PIROLI, Max Planck Institute Garching, Germany
P. RUGGIERO, Université de Genève, Switzerland
T. YOSHIMURA, Tokyo Institute of Technology, Japan

How to apply:

Online application:
http://indico.ictp.it/event/9377/

Female scientists are encouraged to apply.

Deadline:

31 May 2020

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