

Programme on
“Quantum Paths”
April 9 – June 8, 2018

organized by

Pasquale Calabrese (SISSA, Trieste), **Fabian H. L. Essler** (Oxford U),
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Mini-Conference on “Non-ergodicity & integrability”

May 28 – June 1, 2018

• **Monday, May 28, 2018**

09:00 – 9:30 **Registration**

09:30 – 10:15 **Kareljan Schoutens**

Many-body strategies for multi-qubit gates

10:15 – 10:45 *Coffee / Tea Break*

10:45 – 11:30 **Gabor Takacs**

Correlation functions of the quantum sine-Gordon model in and out of equilibrium

11:30 – 12:15 **Austen Lamacraft**

Operator Moments of Noisy Coupled Qubits and the Fredrickson–Andersen Model

12:15 – 14:00 *Lunch Break*

14:00 – 14:45 **Maksym Serbyn**

Probing ergodicity breaking with matrix elements

14:45 – 15:15 *Coffee / Tea Break*

15:15 – 15:40 **Neil Robinson**

Nonthermal states in theories with confinement

15:40 – 16:05 **Nicolo Defenu**

Quantum anomaly and scaling dynamics in the 2D Fermi gas

• **Tuesday, May 29, 2018**

09:30 – 10:15 **Anna Minguzzi**

Damping of Josephson oscillations in strongly correlated one-dimensional atomic gases

10:15 – 10:45 *Coffee / Tea Break*

10:45– 11:30 **Victor Galitski**

Quantum Lyapunov Exponents

11:30 – 12:15 **Jacopo de Nardis**

Large scale dynamics of an interacting 1d Bose gas: hydrodynamics, particle-hole excitations and non-equilibrium steady states

12:15 – 14:00 *Lunch Break*

14:00 – 14:45 **Mario Collura**

Order-parameter statistics out-of-equilibrium in many-body quantum systems

14:45 – 15:15 *Coffee / Tea Break*

15:15 – 15:40 **Alessio Chiocchetta**

Fluctuation-induced quantum Zeno effect

15:40 – 16:05 **Stefan Groha**

Full counting statistics in the transverse field Ising model in and out of equilibrium

• **Wednesday, May 30, 2018**

09:30 – 10:15 **Maurizio Fagotti**

Time evolution of the bipartite entanglement in interacting integrable systems

10:15 – 10:45 *Coffee / Tea Break*

10:45– 11:30 **Andrea de Luca**

Solution of a minimal model for many-body quantum chaos

11:30 – 12:15 **Laurens Vanderstraeten**

Quasiparticle Excitations with Tensor Network States

12:15 – 14:00 *Lunch Break*

14:00 – 14:25 **Eric Vernier**

Out-of-equilibrium dynamics of quantum integrable models: What can we compute exactly?

14:25 – 14:50 **Elena Tartaglia**

Entanglement and diagonal entropies after a quench with no pair structure

14:50 – 15:20 *Coffee / Tea Break*

15:20 – 15:45 **Alessio Lerose**

Quantum many-body Kapitza phases of periodically driven spin systems

15:45 – 16:10 **Luca Lepori**

Long-range topological insulators and weakened bulk-boundary correspondence

• **Thursday, May 31, 2018**

Public Holiday - ESI closed

• **Friday, June 1, 2018**

11:00 – 12:00 **Vladimir Gritsev**

Integrability for dynamics, topology and disorder

All talks take place at ESI, Boltzmann Lecture Hall!