

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

organized by

**Pasquale Calabrese** (SISSA, Trieste), **Fabian H. L. Essler** (Oxford U),  
**Giuseppe Mussardo** (SISSA, Trieste), **Jörg Schmiedmayer** (TU Vienna),  
**German Sierra** (IFT Madrid), **Frank Verstraete** (U Vienna)

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**

*TBA*

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!**