

Universality in Physics Conference Program

May 8 Arrival to Erice and evening wine reception in the Marsala room

May 9

8:00 - 8:50 Breakfast at the center

8:50 – 9:00 Introduction to the Center

9:00 - 9:40 **Jacqueline Bloch** (Paris-Saclay), “Universal scaling laws in the coherence of driven dissipative Bose Einstein condensates”

9:40 - 10:20 **Kazumasa Takeuchi** (U of Tokyo), title to-be-confirmed “Experimental KPZ physics”

10:20 - 10:40 Coffee break

10:40 - 11:20 **Sylvain Prohac** (U of Toulouse), “KPZ fluctuations in finite volume for integrable spin chains”

11:20 – 12:00 **Dmitri Gangardt** (U of Birmingham), “Limit Shapes from Classical to Quantum”

12:00 - 1:20 Lunch

1:20 – 2:00 **Yunxiang Liao** (KTH Stockholm), “Field theory of monitored disordered fermions”

2:00 - 2:40 **Yan Fyodorov** (King's College London), “Parametric correlations in non-Hermitian Quantum Chaos random matrix approach”

2:40 – 3:00 Coffee break

3:00 - 3:40 **Sarang Gopalakrishnan** (Princeton), “Long-lived local coherences from hydrodynamic large deviations”

3:40 - 4:20 **Gregory Schehr** (Sorbonne), “Poisson-Pauli crossover scaling and phase transition in Fermi-gas hole probabilities”

4:20 - 4:40 Coffee break

4:40 - 5:20 **Hayate Suda** (Tohoku University), “Fluctuations of the box-ball system”

5:20 – 6:00 **Matthew Nicoletti** (Stanford), title TBD

6:00 – 8:00 - Dinner in Erice

8:00 - wine reception in the Marsala room...

May 10

8:00 - 9:00 Breakfast at the center

9:00 - 9:40 **Lorenzo Bertini** (U of Rome), "Large deviations associated with the homogeneous Boltzmann equation"

9:40 - 10:20 **Sriram Ganeshan** (CUNY), "Weakly nonlinear dynamics of fractional quantum Hall edge: a hydro perspective"

10:20 - 10:40 Coffee break

10:40 - 11:20 **Tigran Sedrakyan** (U of Massachusetts, Amherst), "Nonequilibrium from Equilibrium Accessing Chiral and Current-Carrying Quantum Matter"

11:20 - 12:00 **Coraline Tao** (U of Rhode Island), "Universality in Molecular Electronic Structure via Random Matrix Theory"

12 - 2:30 Lunch

2:30 Tour of local islands from Porta Trapani

6:00 - 8:00 Free discussion on universality in physics moderated by Corwin & Galitski

8:00 - ... Wine reception Marsala room

May 11

8:00 - 9:00 Breakfast at the center

9:00 - 9:40 **Chiara Paletta** (University of Ljubljana), "On the integrability structure of the deformed rule-54 reversible cellular automaton"

9:40 - 10:20 **Vladimir Kravtsov** (ICTP, Trieste), "Universality of the critical quantum states, optimal bases and compression of data"

10:20 - 10:40 Coffee break

10:40 - 11:20 **Eugene Kanzieper** (Holon Institute of Technology), "Local Level Spacings and the Inspection Paradox in Random Matrix Theory"

11:20 - 12:00 **Sarah Miller** (Applied Research Lab for Intelligence and Security), "A Combinatorial Route to Universality: Surreal Observables and Structural Corrections"

12:00 - 1:20 Lunch

1:20 - 2:00 **Evgeny Verbitskiy** (Groningen University), "Hidden Markov Models and Statistical Mechanics"

2:00 - 2:40 **Andrei Varlamov** (University of Rome), title to-be-confirmed "Fluctuations in Superconductors"

2:40 – 3:00 Coffee break

3:00 - 3:40 **Emil Yuzbashyan** (Rutgers), “Instability of Metals under Strong Electron-Phonon Interaction and the Prospect of Room-Temperature Superconductivity”

3:40 - 4:20 **Benjamin Doyon** (King's College London), title to-be-confirmed “Generalized hydrodynamics”

4:20 – 5:00 **Bernardo Spagnolo** (University of Palermo), “Noise-Induced Phenomena in Classical and Quantum Systems”

5:00 - ... Closing remarks, coffee, dinner, free time, wine reception

May 12

Departure