

KAVLI INSTITUTE FOR THEORETICAL PHYSICS
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KITP Conference: Non-equilibrium dynamics of stochastic and quantum integrable systems

(Feb 16-19, 2016)

Coordinators: Alexei Borodin, Pasquale Calabrese, Vadim Gorin, Takashi Imamura, and Sandrine Peche

Tuesday, Feb 16, 2016

Session Chair: Vadim Gorin (MIT)

8:50am	Lars Bildsten (KITP)	Welcome
9:00am	Herbert Spohn (TUM)	Searching for the Tracy-Widom distribution in nonequilibrium processes
10:00am	Morning Break	
10:30am	Markus Muller (Paul Scherrer)	Manifestations of KPZ-scaling in localized quantum particles: Magnetoresistance, conductance fluctuations and the role of exchange statistics
11:30am	Gregory Schehr (CNRS)	Non-intersecting Brownian motions: from Yang-Mills-theory to KPZ
12:30pm	Lunch Break	

Session Chair: Pierre Le Doussal (LPT-ENS)

2:00pm	Konstantin Khanin (U Toronto)	On directed polymers for random Hamilton-Jacobi equation and KPZ problem
3:00pm	Afternoon Break	
3:30pm	Benjamin Doyon (King's College)	Thermalization and pseudolocality in extended quantum systems
4:30pm	Hubert Saleur (USC)	Long time approach to the steady state in driven quantum impurity problems
5:30pm	RECEPTION	
6:00pm	SPECIAL EVENTS DINNER	

8:00pm

SHUTTLE TO BWSCI**Wednesday, Feb 17, 2016****Session Chair: Pasquale Calabrese (SISSA)**

9:00am Paul Wiegmann (U Chicago) Coulomb gas on Riemann surfaces

10:00am

Morning Break

10:30am David S. Weiss (Penn State) 1D gas experiments near integrability

11:30am Philippe Di Francesco (U Illinois) Macdonald operators, from cluster algebra to elliptic Hall algebra

12:30pm

Lunch Break**Session Chair: Alexei Borodin (MIT)**

2:00pm Jan Felipe van Diejen (U Talca) Bethe Ansatz for a finite q-boson system with boundary interactions

3:00pm

Afternoon Break

3:30pm Jean-Sébastien Caux (UvA) Dynamics and relaxation in integrable quantum systems

4:30pm Rinat Kedem (UIUC) Macdonald theory and fusion products via quantum toroidal algebras

5:30pm

SHUTTLE TO BWSCI**Thursday, Feb 18, 2016****Talks are 45 min + 15 min discussion, Chair: Ivan Corwin (Columbia U)**

9:00am Fabian Essler (U Oxford) Prethermalization and thermalization in models with weak integrability breaking

10:00am

Morning Break

10:30am Joachin Krug (U Koeln) Random paths in evolutionary biology

11:30am Mykhaylo Shkolnikov (Princeton) Edge of beta ensembles and the stochastic Airy semigroup

12:30pm

Lunch Break**Session Chair: Kurt Johansson (KITH)**

2:00pm Austen Lamacraft (U Cambridge) z-measures and the nonlinear Luttinger liquid

3:00pm **Afternoon Break**

3:30pm Jan De Gier (U Melbourne) Multi-species exclusion process and Macdonald polynomials

4:30pm Lauren Williams (UCB) The two-species exclusion process and Koornwinder moments.

5:30pm **RECEPTION**

6:00pm **SPECIAL EVENTS DINNER**

8:00pm **SHUTTLE TO BWSCI**

Friday, Feb 19, 2016

Session Chair: Takashi Imamura (Chiba U)

9:00am Patrik Lino Ferrari (Bonn U) Around the time-time correlations in KPZ growth models

10:00am **Morning Break**

10:30am Kurt Johansson (KTH) Two-time distribution in last-passage percolation

11:30am Marton Kormos (Budapest U) Quantum quenches in the sine-Gordon model: a semiclassical approach

12:30pm **Lunch Break**

Session Chair: Fabian Essler (U Oxford)

2:00pm Joel Moore (UCB) Quantum transport in one dimension from different types of integrability

3:00pm **Afternoon Break**

3:30pm Ilya Gruzberg (U Chicago) Stochastic Loewner chains for DLA-like growth

4:30pm **CONFERENCE END-SHUTTLE TO BWSCI *also available to SB Airport and SB Airbus, Goleta location* (please see registration desk before Friday to sign up)**