



EPSRC Symposium Workshop on Interacting particle systems, growth models and random matrices 19-23 March 2012

Organisers: Neil O'Connell (Warwick), Janosch Ortmann (Warwick) and Jon Warren (Warwick)
All talks will take place in Room B3.03, Mathematics Institute

PROGRAMME

Monday 19th March

- 08:00-09:30 Registration in B1.37 and Coffee in the Mathematics Common Room
- 09:30-10:00 **Jinho Baik (Michigan)** *Maximal crossing and nesting of random matchings*
- 10:00-10:30 **Brian Rider (Colorado)** *Spiking the hard edge*
- 10:30-11:30 Coffee in the Mathematics Common Room
- 11:30-12:00 **Piotr Sniady (Wroclaw)** *Second class particles and random Young tableaux*
- 12:00-12:30 **Timo Seppäläinen (Wisconsin-Madison)** *Fluctuation exponents for directed polymers in the intermediate disorder regime (work in progress)*
- 12:30-14:00 Lunch in the Mathematics Common Room
- 14:00-15:00 Poster session/ Discussion
- 15:00-16:00 Tea in the Mathematics Common Room
- 16:00-16:30 **Daniel Remenik (Toronto)** *Variational problems for the Airy₂ process*
- 16.30-17:00 **Alan Hammond (Oxford)** *The multi-line Airy process and its Brownian-Gibbs property*
- 17:00-17:30 **Oleg Zaboronski (Warwick)** *Pfaffian formulae for one dimensional coalescing and annihilating systems*
- 18:30 Dinner and Drinks reception in the Mathematics Common Room

Tuesday 20th March

- 09:30-10:00 **Patrik Ferrari (Bonn)** *Non-intersecting random walks in the neighborhood of a symmetric tacnode*
- 10:00-10:30 **Kurt Johansson (KTH)** *The Brownian tacnode*
- 10:30-11:00 **Pierre van Moerbeke (Louvain)** *Double Aztec diamond and the tacnode process*
- 11:00-11:30 Coffee in the Mathematics Common Room
- 11:30-12:00 **Gregory Schehr (CNRS)** *Extremes of N vicious walkers for large N : application to the directed polymer and KPZ interfaces*
- 12:00-12:30 **Miguel Tierz (Lisbon)** *Random matrices and vicious walkers in gauge theory problems*
- 12:30-14:00 Lunch in the Mathematics Common Room
- 14:00-15:00 Poster session/ Discussion
- 15:00-16:00 Tea in the Mathematics Common Room
- 16:00-16:30 **Hirofumi Osada (Kyushu)** *Infinite-dimensional stochastic differential equations related to random matrices*
- 16.30-17:00 **Hideki Tanemura (Chiba)** *Stochastic differential equations related to soft-edge scaling limit the triangular lattice*
- 17:00-17:30 **Vadim Gorin (MSRI/IITP)** *Infinitely many non-intersecting random walks*

For further information on these and other events see:

go.warwick.ac.uk/mathsevents

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PROGRAMME (cont.)

Wednesday 21st March

- 09:30-10:00 **Philippe Biane (Marne-la-Vallee)** *Duistermaat-Heckman measure and Brownian motion on matrices*
- 10:00-10:30 **Reda Chhaibi (Paris VI)** *Geometric Littelmann crystals, Whittaker functions and Brownian motion*
- 10:30-11:00 **Makoto Katori (Chuo)** *Vicious Brownian motion, O'Connell's process, and equilibrium Toda lattice*
- 11:00-11:30 **Coffee in the Mathematics Common Room**
- 11:30-12:00 **Benoit Collins (Ottawa)** *Norm convergence for unitary random matrices*
- 12:00-12:30 **Anthony Metcalfe (KTH)** *Universality problems relating to lozenge tilings of a hexagon*
- 12:30-13:30 **Lunch in the Mathematics Common Room**
- 14:03-22:30 **Excursion to Stratford on Avon - coach transport provided to/from campus**

Thursday 22nd March

- 09:30-10:00 **Ivan Corwin (Microsoft/MIT)** *Directed random polymers and Macdonald processes I*
- 10:00-10:30 **Alexei Borodin (MIT)** *Directed random polymers and Macdonald processes II*
- 10:30-11:00 **Leonid Petrov (IITP)** *Uniformly random lozenge tilings of polygons on the triangular lattice*
- 11:00-11:30 **Coffee in the Mathematics Common Room**
- 11:30-12:00 **Herbert Spohn (Munich)** *The KPZ scaling theory applied to the semi-discrete directed polymer model*
- 12:00-12:30 **Tomohiro Sasamoto (Chiba)** *Stationary two-point correlation for the KPZ equation*
- 12:30-13:30 **Lunch in the Mathematics Common Room**
- 14:00-15:00 **Poster session/ Discussion**
- 15:00-16:00 **Tea in the Mathematics Common Room**
- 16:00-16:30 **Benedek Valkó (Madison)** *Point processes and carousels*
- 16:30-17:00 **Stephanie Jacquot (Cambridge)** *Bulk scaling limit of the Laguerre ensemble*
- 17:00-17:30 **Balint Virag (Toronto)** *GOE minors and beads*
- 18:30 **Dinner and Drinks Reception in the Mathematics Common Room**

Friday 23rd March

- 09:30-10:00 **Sasha Gnedin (Utrecht)** *Coherent permutation growth models*
- 10:00-10:30 **Pierre-Loic Méliot (Zurich)** *Fluctuations of random partitions under central measures*
- 10:30-11:00 **Marek Bozejko (Wroclaw)** *Deformed Fock spaces, Hecke operators and monotone Fock space of Muraki*
- 11:00-11:30 **Coffee in the Mathematics Common Room**
- 11:30-12:00 **Alex Bloemendal (Harvard)** *Continuum limits of spiked random matrices and linear PDEs at the soft edge*
- 12:00-12:30 **Friedrich Goetze (Bielefeld)** *Local universality of repulsive particle systems and global approximations for random matrices*
- 12:30-13:30 **Lunch in the Mathematics Common Room**
- 14:00-15:00 **Poster session/ Discussion**
- 15:00-16:00 **Tea in the Mathematics Common Room**

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