The Abdus Salam International Centre for Theoretical Physics

School on Stochastic Geometry, the Stochastic Loewner Evolution, and Non-Equilibrium Growth Processes

Organizer(s): Directors: E. Bettelheim, I. Gruzberg, A. Ludwig, P. Wiegmann. Local Organizer: V.E. Kravtsov
Trieste - Italy, 07 - 18 July 2008

Final programme

Monday, 7 July 2008 (Room:Adriatico Guest House Giambiagi Lecture Hall)

7 July 2008

08:30 - 10:00	(Room: Adriatico Guest House - Giambiagi Lecture Hall Area (Lower Level 1)) **Registration at Adriatico Guest House, lower level 1, outside Giambiagi Lecture Hall**
10:15 - 10:45	--- Coffee break ---
10:45 - 11:00	**Opening**
11:00 - 12:30	**Gregory F. LAWLER** / *Dept. Mathematics, Univ. Chicago, Chicago, U.S.A.* **Introduction to conformally invariant processes - part I**
12:30 - 14:00	--- Lunch break ---
14:00 - 15:30	**Gregory F. LAWLER** / *Univ. Chicago, Dept. of Maths, Chicago, U.S.A.* **Introduction to conformally invariant processes - part II**
15:30 - 16:00	--- Coffee break ---
16:00 - 17:30	**Michel BAUER** / *CEA Saclay, DSM IPhT, Gif-sur-Yvette, France* **Some discrete models of growth and interfaces, and their continuum counterpart - part I**

Tuesday, 8 July 2008 (Room:Adriatico Guest House Giambiagi Lecture Hall)

8 July 2008

09:00 - 10:30 **Bertrand DUPLANTIER** / *CEN Saclay, Physique Theorique, Gif-sur-Yvette, France*
Random conformal geometry and quantum gravity - part I

10:30 - 11:00 --- Coffee break ---

11:00 - 12:30 **Michel BAUER** / *CEA Saclay, DSM IPhT, Gif-sur-Yvette, France*
Some discrete models of growth and interfaces, and their continuum counterpart - part II

12:30 - 14:00 --- Lunch brak ---

14:00 - 15:30 **Gregory FALKOVICH** / *The Weizmann Inst., Complex Systems, Rehovot, Israel*
Symmetries of turbulent state - part I

15:30 - 16:00 --- Coffee break ---

16:00 - 17:30 **Scott SHEFFIELD** / *Courant Institute, Math. Science, New York Univ., U.S.A.*
Quantum gravity: KPZ, SLE, conformal welding and scaling limits - part I

19:00 - 21:00 --- Welcome Reception at Adriatico Terrace ---

Wednesday, 9 July 2008 (Room:Adriatico Guest House Giambiagi Lecture Hall)

9 July 2008

09:00 - 10:30 **Gregory F. LAWLER** / *Univ. Chicago, Dept. Maths, Chicago, U.S.A.*
Introduction to conformally invariant processes - part III

10:30 - 11:00 --- Coffee break ---

11:00 - 12:30 **Bertrand DUPLANTIER** / *CEN, Saclay, Physique Theorique, Gif-sur-Yvette, France*
Random conformal geometry and quantum gravity - part II

12:30 - 14:00 --- Lunch break ---

14:00 - 15:30 **Scott SHEFFIELD** / *Courant Institute, Math. Science, New York Univ., U.S.A.*
Quantum gravity: KPZ, SLE, conformal welding and scaling limits - part II

15:30 - 16:00 --- Coffee break ---

16:00 - 17:30 **Michel BAUER** / *CEA Saclay, DSM IPhT, Gif-sur-Yvette, France*
Some discrete models of growth and interfaces, and their continuum counterpart - part III

Thursday, 10 July 2008 (Room:Adriatico Guest House Giambiagi Lecture Hall)

10 July 2008

09:00 - 10:30 **Bertrand DUPLANTIER** / *CEN Saclay, Physique Theorique, Gif-sur-Yvette, France*
Random conformal geometry and quantum gravity - part III

10:30 - 11:00 --- Coffee break ---

11:00 - 12:30 **Gregory FALKOVICH** / *The Weizmann Inst., Complex Systems, Rehovot, Israel*
Symmetries of turbulent state- part II

12:30 - 14:00 --- Lunch break ---

14:00 - 15:30 **Scott SHEFFIELD** / *Courant Institute, Math. Science, New York Univ., U.S.A.*
Quantum gravity: KPZ, SLE, conformal welding and scaling limits - part III

15:30 - 16:00 --- Coffee break ---

16:00 - 17:30 **Gregory F. LAWLER** / *Univ. Chicago, Dept. Maths, Chicago, U.S.A.*
Introduction to conformally invariant processes - part IV

Friday,11 July 2008 (Room:Adriatico Guest House Giambiagi Lecture Hall)

11 July 2008

09:00 - 10:30 **Scott SHEFFIELD** / *Courant Institute, Math. Science, New York Univ., U.S.A.*
Quantum gravity: KPZ, SLE, conformal welding and scaling limits - part IV

10:30 - 11:00 --- Coffee break ---

11:00 - 12:30 **Bertrand DUPLANTIER** / *CEN Saclay, Physique Theorique, Gif-sur-Yvette, France*
Random conformal geometry and quantum gravity - part IV

12:30 - 14:00 --- Lunch break ---

14:00 - 15:30 **Gregory FALKOVICH** / *The Weizmann Institute, Complex Systems, Rehovot, Israel*
Symmetries of turbulent state - part III

Monday, 14 July 2008 (Room:Adriatico Guest House Giambiagi Lecture Hall)

14 July 2008

09:00 - 10:30 **Robert BAUER** / *Univ. Illinois at Urbana-Champaign, Mathematics, Urbana IL, U.S.A.*
Conformally invariant random simple curves on Riemann surfaces - part I

10:30 - 11:00 --- Coffee break ---

11:00 - 12:30 **Denis BERNARD** / *ENS, Lab. Physique Theorique, Paris, France*
From critical to off-critical interfaces - part I

12:30 - 14:00 --- Lunch break ---

14:00 - 15:30 **Krzysztof GAWEDZKI** / *ENS Lyon, Physique Theorique Enslapp, Lyon, France*
Stochastic processes in turbulent transport - part I

Tuesday, 15 July 2008 (Room:Adriatico Guest House Giambiagi Lecture Hall)

15 July 2008

09:00 - 10:30 **Stanislav SMIRNOV** / *Univ. Geneve, Maths, Geneve, Switzerland*
Conformal invariance in the 2D Ising model - part I

10:30 - 11:00 --- Coffee break ---

11:00 - 12:30 **Robert BAUER** / *Univ. Illinois at Urbana-Champaign, Mathematics, Urbana IL, U.S.A.*
Conformally invariant random simple curves on Riemann surfaces - part II

12:30 - 14:00 --- Lunch break ---

14:00 - 15:30 **Denis BERNARD** / *ENS, Lab. Physique Theorique, Paris, France*
From critical to off-critical interfaces - part II

15:30 - 16:00 --- Coffee break ---

16:00 - 17:30 **Poster Session**

Equilibrium-like extension of the invaded cluster algorithm for the Potts model (I. BALOG - Institute of Physics, Zagreb, Croatia)

1) Evolutionary formalism from random Leslie matrices
2) Computing the non-linear anomalous diffusion equation from first principles (M.O. CACERES - Centro Atomico Bariloche, Inst. di Fisica, San Carlos de Bariolche, Argentina)

1) Evaporation transition in vibro-fluidized granular matter
2) Wet sand flows better than dry sand (J.E. FISCINA - Instituto Balseiro, Argentina / Univ. des Saarlandes, Saarbrucken, Germany)

Conformal symmetry in (2+1)-dimensional stochastic dynamics (Luca MORICONI and Marco MORICONI - Univ. Fed.Do Rio de Janeiro/ Fed. Fluminense, Brazil)

Ground quasi-energy levels splitting and chaotic instantons in kicked double well potential (V. PIATROU - Joint Inst. of Power & Nuclear Research SOSNY, Minsk, Melarus)

Loop models for CFTs (M.A. RAJABPOUR - IPM School of Physics, Tehran / Univ. di Torino, Fisica Teorica, Torino, Italy)

Conformal Iso-height lines on rough surfaces (S. ROUHANI and A.A. SABERI - Sharif Univ., Physics, Tehran, Iran)

Phase separation point is rigid for an 1D model (U. ROZIKOV - Uzbek Acad. of Sciences, Mathematics, Tashkent, Uzbekistan)

19:00 - 21:00 --- Reception at Adriatico Terrace ---

Wednesday, 16 July 2008 (Room:Adriatico Guest House Giambiagi Lecture Hall)

16 July 2008

09:00 - 10:30 **Krzysztof GAWEDZKI** / *ENS Lyon, Physique Theorique Enslapp, Lyon, France*
Stochastic processes in turbulent transport - part II

10:30 - 11:00 --- Coffee break ---

11:00 - 12:30 **Denis BERNARD** / *ENS, Lab. Physique Theorique, Paris, France*
From critical to off-critical interfaces - part III

12:30 - 14:00 --- Lunch break ---

14:00 - 15:30 **Stanislav SMIRNOV** / *Univ. Geneve, Maths, Geneve, Switzerland*
Conformal invariance in the 2D Ising model - part II

Thursday, 17 July 2008 (Room:Adriatico Guest House Giambiagi Lecture Hall)

17 July 2008

09:00 - 10:30 **Stanislav SMIRNOV** / *Univ. Geneve, Maths, Geneve, Switzerland*
Conformal invariance in the 2D Ising model - part III

10:30 - 11:00 --- Coffee break ---

11:00 - 12:30 **Robert BAUER** / *Univ. Illinois at Urbana-Champaign, Mathematics, Urbana IL, U.S.A.*
Conformally invariant random simple curves on Riemann surfaces - part III

12:30 - 14:00 --- Lunch break ---

14:00 - 14:45 **Oded AGAM** / *Racah Inst. Physics, The Hebrew Univ., Jerusalem, Israel*
SEMINAR: Correlated tunneling and the instability of the fractional quantum Hall edge

Friday, 18 July 2008 (Room:Adriatico Guest House Giambiagi Lecture Hall)

18 July 2008

09:00 - 09:45 **Antonio CELANI** / *Inst. Pasteur, UP Genetique in Silico, Paris, France*
SEMINAR: Exploration processes in the plane and stochastic Loewner evolutions

09:45 - 10:30 **Kay WIESE** / *ENS, Lab. Physique Theorique, Paris, France*
SEMINAR: Domain walls in Random Potts

10:30 - 11:00 --- Coffee break ---

11:00 - 12:30 **Krzysztof GAWEDZKI** / *ENS Lyon, Physique Theorique Enslapp, Lyon, France*
Stochastic processes in turbulent transport - part III

12:30 - 13:00 **Closing Remarks**