

The Abdus Salam **International Centre for Theoretical Physics**

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

7 – 18 July 2008 **ICTP**, Miramare, Trieste

The Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy, is organizing a School on Stochastic Geometry, the Stochastic Loewner Evolution and Non-Equilibrium Growth Processes, to take place from 7 to 18 July 2008.

The discovery of the Stochastic Loewner Evolution (SLE) by Oded Schramm and the ensuing revitalization of 2D critical phenomena as a stochastic evolution of geometry has been the one of the most spectacular theoretical developments in recent years. This development was honored by a Fields Metal in 2006 awarded to Wendelin Werner for foundational work done on SLE with O. Schramm and Greg Lawler. SLE has a vast web of interconnections with many areas of theoretical physics, including 2D conformal field theory, 2D quantum gravity, random matrix theory, multifractal properties of stochastic media, stochastic growth phenomena and many others. Moreover, surprising connections with 2D fully developed turbulence and 2D spin glasses have just recently emerged.

The aim of this School is to provide an overview of these important and far-reaching recent developments by the leading experts in this field.





Eldad BETTELHEIM (Hebrew Univ.)

Ilya GRUZBERG (Univ. of Chicago)

Andreas LUDWIG (Univ. of California, Santa Barbara)

Paul WIEGMANN (Univ. of Chicago)

LOCAL ORGANIZER

Vladimir E. KRAVTSOV (ICTP, Trieste)

Topics include:

- Stochastic Loewner Evolution •
- **2D Conformal Field Theory** •
- **2D Quantum Gravity** ٠
- **Multifractal Properties of Stochastic Systems** .
- Stochastic Growth Processes .
- **Connections with 2D Turbulence and Spin Glasses** ٠

PARTICIPATION

Scientists and students from all countries that are members of the United Nations, UNESCO or IAEA may attend the activity. As it will be conducted in English, participants must have an adequate working knowledge of this language. Although the main purpose of the Centre is to help researchers from developing countries through a programme of training activities within a framework of international cooperation, a limited number of students and post-doctoral scientists from developed countries are also welcome to attend.

As a rule, travel and subsistence expenses of the participants are borne by their home institutions. Every effort should be made by candidates to secure support for their fare (or at least half-fare). However, limited funds are available for some participants, who are nationals of, and working in, a developing country, and who are not more than 45 years old. Such support is available only to those attending the entire activity. There is no registration fee.

Requests for participation

There is no registration fee for attending the activity. The "Request for Participation" form is obtainable via Web server: http://agenda.ictp.it/smr.php?1952 It should be completed, signed and returned by using only one of the following ways before 15 March 2008 if asking for financial support, and before 10 May 2008 if not asking for financial support:

If sending an application by e-mail to mailto:smr1952@ictp.it please save and send file attachments in either PDF (preferably) or RTF zipped or Doc format.

If sending an application form by regular mail or courier it should be posted to: School on Stochastic Geometry (smr 1952 c/o Ms. de Comelli) the Abdus Salam International Centre for Theoretical Physics Strada Costiera 11, 34014 Trieste, Italy

(Recent photograph & signature of the candidate are compulsory)

INVITED SPEAKERS

Michel BAUER (Paris) **Robert BAUER** (Urbana-Champaign) **Denis BERNARD** (Paris) Bertrand DUPLANTIER (Paris) Gregory FALKOVICH (Weizmann) Krzysztof GAWEDZKI (Lyon) Greg LAWLER (Chicago) **Pierre LE DOUSSAL** (Paris) Scott SHEFFIELD (New York) Stas SMIRNOV* (Geneva) * to be confirmed

DEADLINE for requesting participation

15 March 2008 (if asking for financial support)

10 May 2008 (if not asking for financial support)