Statistical physics, combinatorics and probability :
from discrete to continuous models

7 September - 18 December 2009

Organizing committee

Mireille Bousquet-Mélou *(CNRS, Bordeaux, France)*, Jérémie Bouttier *(CEA, Saclay, France)*, Grégory Miermont *(École Normale Supérieure, Paris, France)*, Gilles Schaeffer *(CNRS, École Polytechnique, Palaiseau, France)*

This programme aims at bringing together mathematicians, physicists and computer scientists interested in problems that lie at the interface between statistical mechanics, combinatorics and probability theory.
A special emphasis will be put on the interplay between discrete and continuous models, which has recently been the subject of intense research, leading to the definition of universal continuous objects such as the celebrated SLE (stochastic Loewner evolution), the continuum random tree, the integrated super-Brownian excursion, etc.

Long courses

Philippe Di Francesco, Philippe Flajolet, Christian Krattenthaler, Grégory Miermont, Gordon Slade

Short courses

Mihai Ciucu, Robert Cori, Bertrand Eynard, Emmanuel Guitter, Remco van der Hofstadt, Des Johnston, Martin Loebl, Kirone Mallick… (confirmed speakers)

Workshops

7-11 September : Introductory symposium

8-10 October : Two-dimensional lattice models (dimers, spins and loops, alternating sign matrices, plane partitions…).
This workshop is coupled with *Les états de la recherche SMF* (5-7/10)

2-6 November : Embedded random graphs (maps and planar graphs: enumeration, probabilistic aspects and limit behaviors, connections with 2D quantum gravity and matrix models)

7-11 December : Above critical dimension (lace expansion and renormalization, high-dimensional-like models)

Those interested in participating in the programme are invited to contact the Centre Émile Borel or the organizers.
Participation of postdocs and PhD students is strongly encouraged.
For more information and updates, see the webpage of the program at: **http://ipht.cea.fr/statcomb2009**

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Courtesy of Scott Sheffield