ROBERT BAUER
University of Illinois at Urbana-Champaign

SLE(8/3) in annuli

Consider chordal SLE(8/3) in the unit disk from x to 1. For $0 < r < 1$ let $p(x, r)$ denote the probability that the SLE avoids the centered disk of radius r. We will derive a partial differential equation characterizing the function $p(x, r)$. We will also discuss a generalization of this characterization to multiply connected domains and a definition of SLE(8/3) in such domains for which the resulting measure satisfies the restriction property.

VINCENT BEFFARA
CNRS - UMPA - ENS Lyon

Critical percolation on other lattices

We investigate ways to generalize Smirnov's proof of Cardy's formula, giving the limit of crossing probabilities for critical site-percolation in regions of the usual triangular lattice, to other setups. The natural goal is of course to obtain the same result for general periodic triangulations, and for bond-percolation on the square lattice. As it turns out, it seems to be the case that a priori estimates of the Russo-Seymour-Welsch type are almost sufficient to conclude.

JOHN CARDY
Oxford University

The bulk stress tensor and conformal restriction

In conformal field theory a crucial role is played by the bulk stress tensor and its associated Ward identities. An object is defined in $SLE_{8/3}$, and other processes satisfying conformal restriction, which is shown to obey these identities, and which thus may be regarded as the definition of the stress tensor. Coauthors are Benjamin Doyon, Valentina Riva. This generalises earlier results of Friedrich and Werner.

ZHEN-QING CHEN
University of Washinton

On symmetric stable processes

Motivated by some problems from complex analysis, there is some interest in studying SLE driven by symmetric stable processes instead of Brownian motions. In this talk, I will survey some old and recent results on symmetric stable processes.

JULIEN DUBEDAT
Courant Institute

Commutation of SLEs

In cases where a single interface converges to SLE (eg percolation), it is interesting to consider the joint scaling limit of several interfaces. Such scaling limits should satisfy a simple "commutation" condition. Solutions to this condition are classified and to some extent made explicit. Applications to percolation and SLE in multiply connected domains are given.

BERTRAND DUPLANTIER
Theoretical Physics, Saclay

SLE and Quantum Gravity

We present the elements of the approach to SLE via Quantum Gravity. The standard KPZ map is extended by duality to a map which commutes with the duality properties of the $SLE(kappa)$ process. Quantum gravity equivalences between random paths in the standard plane are derived in this way, with applications to the $SLE(kappa, rho)$ process, to contact exponents between paths, and to hiding exponents for Brownian paths and self-avoiding walks.

NAM-GYU KANG
Massachusetts Institute of Technology

On the quantitative boundary behavior of SLE

We will derive Makarov's law of iterated logarithms for SLE. As a consequence, we will compare the harmonic measure to the Hausdorff measure associated with a logarithmico-exponential function. We will also discuss (pre-)Schwarzian derivatives of SLE, Hölder exponent of SLE_κ ($\kappa \neq 4$), and the exceptional set of SLE_4.

MICHAEL KOZDRON
University of Regina

Loop-erased random walk and Fomin's identity

In this talk, I will outline the recent proof of a 2001 conjecture of S. Fomin concerning a relationship between crossing probabilities of two-dimensional loop-erased random walk and planar Brownian motion. This conjecture was proved by establishing estimates of random walk exit probabilities in simply connected subsets. These estimates can also be used to give a quick derivation of a crossing exponent for loop-erased walk first proved by R. Kenyon in 2000. This talk is based on joint work with Greg Lawler.

GREG LAWLER
Cornell University

"Two-sided SLE8/3 and self-avoiding polygons" and "Laplacian random walk and SLE"

In two talks I will discuss two discrete models for which conformal invariance in the limit is only a conjecture, the self-avoiding walk/polygon and the Laplacian random walk with exponent b. I will discuss the conjectures about the limits and discuss particular properties of SLE which lead one to make these conjectures. There will be some discussion of non-simply-connected domains.

WENDELIN WERNER
University Paris-Sud

Self-avoiding loops

I will describe recent and not so recent results concerning conformally invariant measures on self-avoiding loops.