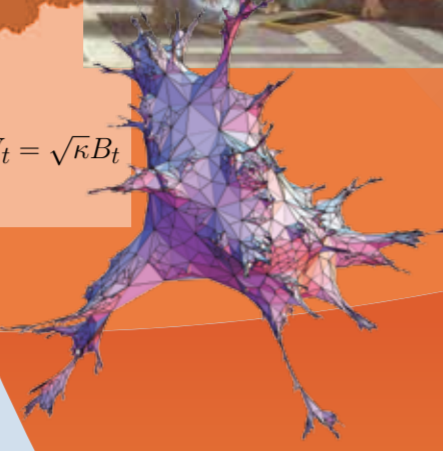




$$\partial_t g_t(z) = \frac{2}{g_t(z) - W_t}, \quad W_t = \sqrt{\kappa} B_t$$



The aim of the SwissMAP Master class 2015/2016 is to provide a small number of outstanding students with Master-level courses in probability together with more advanced courses in the field of planar statistical physics.

1st semester courses:

Introduction to statistical physics
Brownian Motion and stochastic calculus
Martingales and Markov processes
On various aspects of the dimer and planar Ising models

2nd semester courses:

Conformal invariance of lattice models
Schramm-Loewner Evolution and GFF
Random planar maps
Geometric representations of lattice models

A number of mini-courses including:

Coarse geometry and random processes
Probability on groups
Large deviations

Additional information and application form is available on www.nccr-swissmap.ch/master-class-2015.

For questions write to swissmapmasterclass2015@gmail.com.

The program is aimed at Master students. Advanced undergraduates and beginning PhD students are also welcome. The participants will enroll in a one-year master program in the university of Geneva starting in September 2015.

A number of fellowships covering accommodation and local expenses are available.

For full consideration, candidates should apply using the web form before the 17th of January 2015.

Confirmed lecturers:

I. Benjamini
D. Chelkak
D. Cimasoni
H. Duminil-Copin
C. Hongler
J. Miller
S. Smirnov
Y. Velenik
W. Werner