Summer School:
Dyson-Schwinger equations
Topological expansions
and
Random matrices

Analyzing the large dimension asymptotics of highly correlated systems such as random matrices and random tilings has been a hot topic for the last twenty years. This summer school will investigate a general class of such models using the so-called Dyson-Schwinger equations and generalizations such as Nekrasov's equations.

Alice Guionnet (Lyon) will give ten main lectures. There will be supplementary lectures by senior researchers including:

Charles Bordenave (Toulouse)
Gaetan Borot (Bonn, to be confirmed)
Paul Bourgade (NYU)
Vadim Gorin (MIT)
Sylvia Serfaty (NYU)

This school is intended for graduate students and postdocs starting to learn random matrix theory. The lectures will be accompanied by tutorials and problem sessions.

Photo: MIT

Dates: **August 28 to September 1, 2017**

Main Lecturer: **Alice Guionnet (Lyon)**

Location: **Columbia Mathematics Department**

Funding: **NSF CBMS conference grant DMS-1642595 and the Minerva Lecture Series**

Organizers: **Ivan Corwin and Yi Sun**

Website: **goo.gl/aKmSx6**

To apply as a funded participant, please email **dysonschwinger@gmail.com** by the deadline of **March 1, 2017** with your name, university, current position, short statement of purpose, and CV. Please also arrange for a short letter of recommendation from your advisor or postdoc mentor.