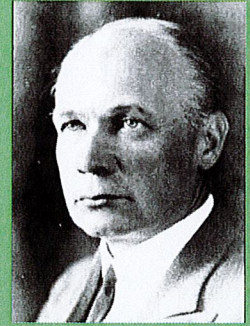# Plancherel lecture 2017

Monday October 9th, 2017, 17:30
Reception-apéro starts at 16:45 au Pavillon Vert
University of Fribourg, Pérolles, PER04, auditoire (0.110)

Hugo Duminil-Copin
IHES & University of Geneva

Random paths in the plane

It is known for a long time that the random walk model provides a natural way of sampling a random path on a planar graph such as the square or hexagonal lattices. But how can one sample a random path with the additional constraint that the path does not visit the same vertex twice? We will see that this natural question, first raised by the chemist Paul Flory in 1957, is intimately related to a beautiful combinatorial problem: for a fixed lattice, what is the number of self-avoiding paths of length n starting from a prescribed vertex. In particular, we will provide a (partial) answer for the hexagonal lattice, and explain a connection with the geometry of typical self-avoiding paths.
No background in probability is necessary for this talk.

The Plancherel lecture takes place every two years since 2005 (in odd years) at the University of Fribourg; it is a joint colloquium with the University of Bern, who organizes the Schläfli Lectures in even years.

The lecture is named after Michel Plancherel, who was a member of the mathematics department of the University of Fribourg between 1911 and 1920. Every two years a renowned mathematician is invited to give a presentation directed to students and researches alike. It is an opportunity for mathematicians from Bern and Fribourg to meet and to discover together new directions of research in mathematics.

There will be a **dinner** after the lecture at Ristorante Bindella Fribourg.

Please **register** before October 2nd by e-mail at `isabella.schmutz@unifr.ch`

For more information visit
`http://homeweb.unifr.ch/manolesc/Pub/Plancherel2017.html`