

## **Reciprocal characteristics and concentration of measure**

**Giovanni Conforti** (Universität Leipzig)

Time **Thursday, May 19, 2016 at 15:00**

Place **Campus Kirchberg, room B02**

In this talk, motivated by the Schrödinger problem, a stochastic counterpart to the Optimal transport problem, we introduce reciprocal classes and reciprocal characteristics. The latter should be thought as some sort of invariant for the class of processes having the same bridges. Then we show how, in a variety of situations, imposing some geometrical assumptions on the reciprocal characteristics allow to control the fluctuations of the bridges of a Markov process. As a guiding example, we will discuss a concentration of measure inequality for the marginals of the bridges of a gradient diffusion.