## Séminaire de Probabilités et Statistique

## Mardi 29 Janvier à 14h00

Laboratoire Dieudonné Salle de conférence - LJAD

## Nicolas Perkowski

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 $Controlled\ distributions\ in\ infinite\ dimensions:\ The\ Burgers\ generator$ 

By now there exist very powerful and general solution theories for singular SPDEs, based on regularity structures and related pathwise theories. But the evolution of the laws of these equations is still poorly understood because a priori the usual probabilistic tools break down. In my talk, I will present a probabilistic theory for a class of singular SPDEs of Burgers type. We construct a domain of controlled (and non-smooth) test functions for the infinitesimal generator and based on that we study the Kolmogorov forward and backward equations and the martingale problem. This is joint work with Massimiliano Gubinelli.