Godofredo Iommi and Paul Dario\textsuperscript{PUC Chile & ENS} 

\textbf{Double Seminar}

\textbf{Abstract:}

\textbf{Godofredo Iommi (PUC Chile)}

\textbf{Title: Upper semi-continuity of the entropy map for Markov shifts}
Abstract: In this talk I will show that for finite entropy countable Markov shifts the entropy map is upper semi-continuous when restricted to the set of ergodic measures. This is joint work with Mike Todd and Anibal Velozo.

\textbf{Paul Dario (ENS)}

\textbf{Title: Homogenization on supercritical percolation cluster}
Abstract: The standard theory of stochastic homogenization requires an assumption of uniform ellipticity on the environment. In this talk, we investigate how one can remove this assumption in a specific case: the infinite cluster of the supercritical Bernoulli percolation of $\mathbb{Z}^d$. We will present a renormalization argument for the infinite cluster and show how one can use it to adapt the theory developed in the uniformly elliptic setting. We will then review some results which can be obtained through this technique: homogenization theorem, large scale regularity, Liouville theorem and bounds on the corrector.