1108-37-380   **Jerome Rousseau*** (`jerome.rousseau@ufba.br`). *Hitting time statistics for random dynamical systems.*

In this talk, we will give a quick overview of recent results on law of rare events for random dynamical systems.

For super-polynomially mixing random dynamical systems, we obtain an exponential law (with respect to the invariant measure of the skew-product).

For random subshifts of finite type, we analyze the distribution of hitting times with respect to the sample measures. We prove that with a superpolynomial decay of correlations one can get an exponential law for almost every point and with stronger mixing assumptions one can get a law of rare events depending on the extremal index for every point. (These are joint works with Benoit Saussol and Paulo Varandas, and Mike Todd). (Received January 19, 2015)