In this talk we address the random dynamics of stochastic reaction-diffusion equations subject to small heavy-tailed Lévy noise. In particular we explain the associated first exit problem of the stochastic equation from the domain of attraction of a stable fixed point of the deterministic system in the limit of small noise intensity. After a short introduction to Lévy processes in a Hilbert space we shall state the main results and lay out the strategy of the proof. If time permits we will have a look at the associated metastability result. This is joint work with A. Debussche and P. Imkeller. (Received September 21, 2015)