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Michael A. Högele^{*} (ma.hoegele^Quniandes.edu.co), Universidad de los Andes, Departamento de Matematicas, KR 1 No 18 A-10, BL H., Botota, D.C., Colombia, and Arnaud Debussche and Peter Imkeller. The dynamics of reaction-diffusion equations with heavy-tailed Lévy noise.

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)