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Kramers-like problem for underdamped Levy flights

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The noise driven motion in a bistable potential acts as the archetypal model of various physical phenomena. In the weak noise limit, for the overdamped particle driven by a non-equilibrium, α -stable noise the ratio of forward and backward transition rates depends only on the width of the potential barrier separating both minima. The poster presents analytical and numerical results showing that in the regime of full dynamics the ratio of transition rates depends both on widths and heights of the potential barrier separating minima of the double-well potential.

K. Capała and B. Dybiec, *Underdamped, anomalous kinetics in double-well potentials*, Phys. Rev. E **102**, 052123 (2020).

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