

Abstract Submitted
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Flying over decades JUDITH HOELLER, MENA ISSLER¹, Graduate Student, ATAC IMAMOGLU, Professor — Levy flights have been extensively used in the past three decades to describe non-Brownian motion of particles. In this presentation I give an overview on how Levy flights have been used across several disciplines, ranging from biology to finance to physics. In our publication we describe how a single electron spin 'flies' when captured in quantum dot using the central spin model. At last I motivate the use of Levy flights for the description of anomalous diffusion in modern experiments, concretely to describe the lifetimes of quasi-particles in Josephson junctions.

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