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Title: Random walk among Bernoulli obstacles

Abstract: Consider a discrete time simple random walk on $\mathbb Z^d, d \geq 2$ with random Bernoulli obstacles, where the random walk will be killed when it hits an obstacle. We show that the following holds for a typical environment: conditioned on survival up to time n, the random walk will be localized in a single island. In addition, the limiting shape of the island is a ball and the asymptotic volume is also determined. This is based on joint works with Changji Xu. Time permitting, I will also describe a recent result in the annealed case, which is a joint work with Ryoki Fukushima, Rongfeng Sun and Changji Xu.