

Title: Persistence Probabilities

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Persistence probabilities concern how likely it is that a stochastic process has a long excursion above fixed level and of what are the relevant scenarios for this behavior. Power law decay is expected in many cases of physical significance and the issue is to determine its power exponent parameter. I will survey recent progress in this direction (jointly with Jian Ding, Fuchang Gao, and Sumit Mukherjee), dealing with random algebraic polynomials of independent coefficients, iterated partial sums and other auto-regressive sequences, and with the solution to heat equation initiated by white noise.