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Title:

Hitting time for the geometric Lorenz attractor.

Abstract: The hitting time is the time needed for the orbit of a point x hit for the first time a neighborhood of a given point x_0 . The hitting time behaviour is one of the indicators for the chaoticity of a system. We shall present a proof that the hitting time associated to a geometric Lorenz attractor satisfies a logarithm law: as the radius of the neighborhood decreases to 0 its asymptotical behavior is a power law whose exponent is related to the local dimension at x_0 .

This is a joint work with S. Galatolo.