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Branching diffusion in inhomogeneous media

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We investigate the long-time evolution of branching diffusion processes (starting with a finite number of particles) in inhomogeneous media. The qualitative behavior of the processes depends on the intensity of the branching. In the super-critical regime, we describe the asymptotics of the number of particles in a given domain. In the sub-critical and critical regimes, we show that the limiting number of particles is finite and describe its distribution.

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