

Ancestry in locally regulated populations
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The spatial embedding of genealogies in models with fluctuating population sizes and local regulation can be viewed as a random walk in a space-time dependent random environment. We discuss regeneration approaches to study the behaviour and implications for spatial type distributions. A simple guiding example is the discrete time contact process, with an ancestral lineage given by a directed walk on an oriented percolation cluster.

Based on joint work with Jiri Cerny, Andrej Depperschmidt and Nina Gantert.