



北京理工大学

数学与统计学院学术报告

Coupling for continuous state branching processes with immigration

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摘要:

Consider a class of (sub) critical continuous state branching processes with immigration (CBI). First, we provide a jump cluster decomposition where each cluster is induced by a mother jump representing a triggering shock followed by secondary jumps. Based on it, we obtain that a CBI process admits a successful coupling by change of measure if the Levy measure in the branching mechanism has an absolutely continuous component. Then the ergodicity and exponential ergodicity of the processes are derived. This is a joint work with Chen Shukai.

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