

Institute for Applied Mathematics, Bonn University

Oberseminar Stochastik

Thursday, 13 November 2025, 16:30

Lipschitz-Saal (LWK 1.016)

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Extremal Process of Last Progeny Modified Branching Random Walks

In this work, we consider a modification of the usual Branching Random Walk (BRW), where the position of each particle at the last generation n is modified by an i.i.d. copy of a random variable Y , which may differ from the driving increment distribution. This model was introduced by Bandyopadhyay and Ghosh (2021) and they termed it as Last Progeny Modified Branching Random Walk (LPM-BRW). Depending on the asymptotic properties of the tail of Y , we describe the asymptotic behaviour of the extremal process of this model as $n \rightarrow \infty$.

This work is a joint work with Bastien Mallein.