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## A stochastic model for mutation and natural selection with mass extinction on $\mathbb{T}^d$

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## Abstract

We propose a stochastic model for evolution through mutation and natural selection that evolves on a  $\mathbb{T}^d$  tree. We obtain sharp and distinct conditions on the set of parameters for extinction and survival both on the whole  $\mathbb{T}^d$  and on a fixed branch of it. This is a joint work with Fábio Machado, Fábio Lopes and Alejandro Roldán-Correa.









