

# The maximum of branching Brownian motion

*Friday, 5 August 2022 11:00 (20 minutes)*

The order of the maximum of branching Brownian motion (BBM) differs in a logarithmic correction term from the one in corresponding independent setting. In this talk we zoom into this transition. We study “variable speed branching Brownian motions” where the “speed functions”, that describe the time-inhomogeneous variance, approach the one of BBM from below. We show that the logarithmic correction only depends on the initial and final diffusion parameters. We will see that the key to the above result is a precise understanding of the entropic repulsion experienced by an extremal particle.

Based on joint work in progress with Lisa Hartung.

**Primary author:** ALBAN, Alexander (Gutenberg University Mainz)

**Session Classification:** Session A7 Stochastics

**Track Classification:** Stochastics