

# BERNOULLIS TAFELRUNDE

MATH STUDENTS AND PHDS SEMINAR

**Wednesday, 03.12.2025, 12:15-13:00**

Seminar Room 05.001, Spiegelgasse 5

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## Branching Random Walk in Random Environment

### ABSTRACT

One approach to modeling population growth in a heterogeneous environment is through a branching random walk with inhomogeneous branching rates. In this talk, we introduce the branching random walk in a spatially random branching environment and discuss its known properties. We then turn to the behavior of its maximal displacement, for which a functional central limit theorem has been established. Finally, we discuss recent progress on proving the tightness of the maximal displacement around its median.



*Scan before 02.12 at 18:00 to  
register for lunch*