

FACHBEREICH 10 MATHEMATIK UND INFORMATIK Prof. Dr. Arthur Bartels Dekan

22.06.2023

Einladung

zu der am Mittwoch, den 28. Juni 2023, um 10:15 Uhr im Hörsaal M4 stattfindenden

Antrittsvorlesung

von Frau Juniorprofessorin Dr. Anna Gusakova

über das Thema

"Random polytope"

Kurzfassung:

Random polytopes are among the most central objects studied in stochastic geometry. In classical settings, a random polytope is a randomly generated convex polytope, which leads to many different models, depending on the chosen source of randomness and the generating procedure. In this talk, we will consider two models: A convex hull of independent and identically distributed random points and the typical cell of a random tessellation. A random tessellation is another key object of stochastic geometry, which is a random countable collection of convex polytopes covering the space and having disjoint interiors. The typical cell of a random tessellation may intuitionally be understood as a uniformly chosen polytope of this collection.

During this talk I will give a brief overview of the above models and present a selection of recent results related to probabilistic properties of certain types of random polytopes, which covers a part of my research.

gez. Arthur Bartels, Dekan