RANDOM LAGUERRE TESSELLATIONS

ANNA GUSAKOVA

Abstract. A (random) tessellation in $\mathbb{R}^d$ is a (random) countable locally-finite collection of convex polytopes, which cover the space and have disjoint interiors. One of the most well-studied and classical models is Poisson-Voronoi tessellation and in this talk we consider its generalized (weighted) version called Poisson-Laguerre tessellation. We will describe its construction and consider a number of properties including sectional properties and probabilistic description of the typical cell, as well as central limit theorems. We will also exploit the connection of the certain models with the extreme value theory.

[Joint work with Christoph Thäle, Zakhar Kabluchko and Mathias in Wolde-Lübke.]

Universität Münster
Email address: gusakova@uni-muenster.de