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Abstract

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Tessellations in hyperbolic space

Joint with Collaborators

Random tessellations in d-dimensional Euclidian space have been studied intensively in the last few decades. Famous models are for example hyperplane tessellations, Voronoi tessellations or STIT tessellations. Each of these models (and their combinations) has a variety of applications, for instance in telecommunication, biology or geography. Recent work aims to transferring known results into spherical space for further applications and a deeper understanding of the connection between probability and geometry. To follow this line of research this talk will deal with the construction of random tessellations in d-dimensional hyperbolic space. Further on we will give some first results in the hyperbolic setting of classical problems considered in stochastic geometry.