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Geometry of Random Polytopes and Orlicz Spaces

Joscha Prochno¹, David Alonso-Gutiérrez²

We present an approach to study the geometry of random polytopes that is based on probabilistic inequalities for random vectors in terms Orlicz norms. To be more precise, we relate a natural Orlicz function to a convex body K in \mathbb{R}^n . This Orlicz function is then used to study geometric functionals on random polytopes generated by an isotropic K .

Referencias

- [1] D. Alonso-Gutiérrez, J. Prochno: Estimating support functions of random polytopes via Orlicz norms, *Discrete Comput. Geom.* **Vol. 49** (3) (2013), 558–588.
- [2] D. Alonso-Gutiérrez, J. Prochno: On the gaussian behavior of marginals and the mean width of random polytopes, *Proc. Amer. Math. Soc.* **Vol. 143** (2015), 821–832.
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¹Department of Mathematics
University of Hull
Cottingham Road, Hull, Yorkshire HU6 7RX, UK
j.prochno@hull.ac.uk

²Departament de Matemàtiques
Universitat Jaume I
Campus de Riu Sec, E12071 Castelló de la Plana, Spain
alonsod@uji.es