

Order Statistics for Faces of Random Polytopes

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We study extremal properties of spherical random polytopes, the convex hull of random points chosen from the unit Euclidean sphere in $\mathbb{R}^n$. The extremal properties of interest are the expected values of the maximum and minimum surface area among facets. We determine the asymptotic growth in every fixed dimension, up to absolute constants. Based on joint work with B. Leroux, L. Rademacher and C. Schuett.

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