

The L_p -Floating Area and Entropy on the Sphere

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The floating area was previously investigated as a natural extension of classical affine surface area to non-Euclidean convex bodies in spaces of constant positive curvature. We introduce the family of L_p -floating areas for spherical convex bodies, as an analog to L_p -affine surface area measures from Euclidean geometry. Using the L_p -floating area, we define a new entropy functional for spherical convex bodies and establish a dual isoperimetric inequality. Based on joint works with Florian Besau.

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