

ATELIER EN ANALYSE CONVEXE ET ANALYSE GÉOMÉTRIQUE ASYMPTOTIQUE  
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WORKSHOP ON CONVEXITY AND ASYMPTOTIC GEOMETRIC ANALYSIS  
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## Entropies for convex bodies

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There exist many connections between information theory and geometric analysis and convexity. We give more instances of such connections and show that fundamental objects from affine convex geometry, the  $L_p$ -affine surface areas for a convex body  $K$ , are closely related to information theory, namely to Renyi divergences.

We give applications to approximation questions and to log concave functions.

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