

Colloquium

September 13, 2013

HH-3017, at 2 p.m.

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Divergence for s -concave and log concave functions

Abstract:

We prove new entropy inequalities for log concave and s -concave functions that strengthen and generalize recently established reverse log Sobolev and Poincaré inequalities for such functions. This leads naturally to the concept of f -divergence and, in particular, relative entropy for s -concave and log concave functions. Applications are given in the theory of convex bodies.