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Title: The extreme points of subsets of s-concave probabilities and a geometric localization theorem.

Abstract: We prove that the extreme points of the set of s-concave probability measures satisfying a linear constraint are some Dirac measures and some s-affine probabilities suppported by a segment. ¿From this we deduce that the constrained maximization of a convex functional on the s-concave probability measures is reduced to this small set of extreme points. This gives a new approach to a localization theorem due to Kannan, Lovász and Simonovits which happens to be very useful in geometry to obtain inequalities for integrals like concentration and isoperimetric inequalities. Roughly speaking, the study of such inequalities is reduced to these extreme points. Joint work with O. Guédon.