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Title: Entropy and Volume Estimates

Abstract: We find a general estimate on the euclidean entropy of a convex body K in R^n in terms of the inner volume of K . The inner volume is the number of the unit cells of Z^n contained in K .

The result is that the euclidean entropy of K is bounded by the sum of the inner volumes of the coordinate projections of K .

This implies the solution of the Talagrand's entropy problem, obtained jointly with S.Mendelson, and has consequences in convex geometry (optimal Elton theorem) and probability (majorizing Gaussian processes).