

Generators, Extremals and Bases of Max Cones

by

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Abstract

We develop a theory of max cones based on the observation that extremals are minimal elements of max cones under suitable scalings of vectors. We give new proofs of existing results suitably generalizing, restating and refining them. New results include an analog to Minkowski's theorem, properties of totally dependent sets and computational bounds for the problem of finding the (essentially unique) basis of a finitely generated cone.