

On the Solidness of the Polar of Recession Cones

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Abstract : In the theory of Pareto efficient points, the existence of a bounded base for a cone K of a normed space X is so important. In this article, we study the geometric structure of a nonzero closed convex cone K with a bounded base. For this aim, we study the structure of the polar cone $K^\#$ of K . Furthermore, we obtain a necessary and sufficient condition for a nonempty closed convex set C so that its recession cone C^∞ has a bounded base.

Keywords : solid cones, recession cones, polar cones, bounded base

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