

# Constant Along Primal Rays Conjugacies and the $l_0$ Pseudonorm

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**Abstract:** We introduce a class of so-called constant along primal rays (Capra) conjugacies that are suitable to study zero-homogeneous functions. Focusing on the  $l_0$  pseudonorm, we show that it is Capra-convex in the sense of generalized convexity (equal to its biconjugate), that it satisfies a convex factorization property (the  $l_0$  pseudonorm coincides, on the unit sphere, with a convex lsc function) leading to variational formulations, and we provide expressions of the Capra-subdifferential.

## References:

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