DUALITY FOR QUASICONVEX MINIMIZATION OVER CLOSED CONVEX CONES

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Abstract: We establish a general duality theorem in a generalized conjugacy framework, which generalizes a classical result on the minimization of a convex function over a closed convex cone. Our theorem yields two quasiconvex duality schemes; one of them is of the surrogate duality type and is applicable to problems having an evenly quasiconvex objective function, whereas the other one is applicable to problems with Lipschitz quasiconvex objective functions and yields duals whose objective functions do not involve any surrogate constraint. This is joint work with Wilfredo Sosa.