



SEMINAR

A mean value theorem for tangentially convex functions

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Tangentially convex functions constitute an important class of functions in nonconvex optimization. In this talk, I will present an equality type mean value theorem for tangentially convex functions in terms of tangential subdifferentials, which generalizes the classical one for differentiable functions, as well as Wegge theorem for convex functions. The new mean value theorem can be applied, analogously to what is done in the classical case, to characterize, in the tangentially convex context, Lipschitz functions, increasingness with respect to the ordering induced by a closed convex cone, convexity, and quasiconvexity.