ON DERIVATIVE CRITERIA FOR METRIC REGULARITY AND EXTENSIONS TO HÖLDER CONTEXT; APPLICATIONS

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In the paper, we provide new criteria for metric regularity of set-valued maps. These results are based on variations of set valued maps. This approach enables us to study and characterize the higher order metric regularity i.e. the extension of metric regularity to Hölder context. This could be also easily entended to conical metric regularity with respect to a cone with compact sole. We give several applications to continuous dependence of a parametrized set of constraints and computations of tangent cone.

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