LOCAL MINIMA FOR CONSTRAINED MINIMIZATION PROBLEMS

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In the last years, local minima for constrained minimization problems have attracted several outstanding mathematicians and the interest towards this kind of problems has grown more and more, not only for their intriguing analytical structure, but also in view of their applications in a wide range of contexts. Motivated by this wide interest in the literature, the leading purpose of this talk is to present some recent results on elliptic equations, mainly related to a wide class of functionals defined through multiple integrals of Calculus of Variations. Applications to quasilinear boundary value problems will be presented and some open problems briefly discussed; see [1] and [2, Chapter 8] for related topics.

References

[1] G. Molica Bisci, *Local minima for some functionals in the Calculus of Variations*, submitted for publication (2021), 1–53. 1

[2] G. Molica Bisci and P. Pucci, Nonlinear Problems with Lack of Compactness, De Gruyter Series in Nonlinear Analysis and Applications **36** (2021), i+vii, 1–266. 1

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