

# Wellposedness in the Calculus of Variations

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**Abstract:** We consider the stability of solutions of variational problems with respect to perturbations of the integrand, raised by S. M. Ulam [A Collection of Mathematical Problems, Interscience, Los Alamos, 1958]. We prove some results concerning Ulam's problem by using the theory of wellposedness. We consider the notion of wellposedness introduced by T. Zolezzi [Well-posedness criteria in optimization with application to the calculus of variations, Nonlinear Anal. TMA 25 (1995) 437-453] and we deal with perturbations of the integrands related to variational convergence. Moreover some criteria to obtain variational convergence of sequences of non-convex integrals are given.



**Classification (MSC2000):** 49K40

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