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Compacite par compensation: condition necessaire et suffisante de continuite faible sous une hypothèse de rang constant. (French) [Zbl 0464.46034](#)

Ann. Sc. Norm. Super. Pisa, Cl. Sci., IV. Ser. 8, 69-102 (1981).

For a scan of this review see the [web version](#).

MSC:

46E35 Sobolev spaces and other spaces of “smooth” functions, embedding theorems, trace theorems

35A22 Transform methods (e.g., integral transforms) applied to PDEs

Cited in **2** Reviews
Cited in **87** Documents

Keywords:

[compensation](#); [compacity](#)

Full Text: [Numdam](#) [EuDML](#)

References:

- [1] J.M. Ball , On the calculus of variations and sequentially weakly continuous maps, in Ordinary and Partial Differential Equations, Proceedings of the fourth conference held at Dundee (march 1976), ed. by W. N. EVERITT and B. D. SLEEMAN. Lecture Notes in Mathematics , No. 564 , Springer , Berlin (1976), pp. 13 - 25 , MR 637229 | Zbl 0348.49004 · [Zbl 0348.49004](#)
- [2] J.M. Ball , Convexity conditions and existence theorems in non-linear elasticity , Arch. Rational Mech. Anal. , 63 (1977), pp. 337 - 403 . MR 475169 | Zbl 0368.73040 · [Zbl 0368.73040](#) · doi:10.1007/BF00279992
- [3] J.M. Ball , Constitutive inequalities and existence theorems in non-linear elastostatics, in Non-linear Analysis and Mechanics, Heriot-Watt Symposium , Vol. I , ed. by R. J. KNOPS, Research Notes in Mathematics , No. 17 , Pitman , Londres (1977), pp. 187 - 241 . MR 478899 | Zbl 0377.73043 · [Zbl 0377.73043](#)
- [4] J. Hadamard , Sur une question de calcul des variations , Bull. Soc. Math. France , 30 (1902), pp. 253 - 256 . Réédité in Oeuvres de Jacques Hadamard , Editions du CNRS , Paris (1968), Tome 2 , pp. 467 - 470 . JFM 33.0387.02 · [Zbl 33.0387.02](#)
- [5] J. Hadamard , Sur quelques questions de calcul des variations , Bull. Soc. Math. France , 33 (1905), pp. 73 - 80 . Réédité in Oeuvres de Jacques Hadamard , Editions du CNRS , Paris (1968), Tome 2 , pp. 471 - 478 . Numdam | MR 1504505 | JFM 36.0430.02 · [Zbl 36.0430.02](#) · [numdam:BSMF_1905__33__73__0](#)
- [6] J. Hadamard , Leçons sur la propagation des ondes et les équations de l'hydrodynamique , Herman , Paris (1903). Réédité par Chelsea , New York (1949). JFM 34.0793.06 · [Zbl 34.0793.06](#)
- [7] T. Kato , On a coerciveness theorem by Schulenberger and Wilcox , Indiana Univ. Math. J. , 24 , (1975), pp. 979 - 985 . MR 370244 | Zbl 0313.47003 · [Zbl 0313.47003](#) · doi:10.1512/iumj.1975.24.24082
- [8] S.G. Mikhailin , Multidimensional singular integrals and integral equations , Pergamon Press , Oxford (1965). MR 185399 | Zbl 0129.07701 · [Zbl 0129.07701](#)
- [9] C.B. Morrey Jr. , Quasiconvexity and the lower semicontinuity of multiple integrals , Pacific J. Math. , 2 (1952), pp. 25 - 53 . Article | MR 54865 | Zbl 0046.10803 · [Zbl 0046.10803](#) · doi:10.2140/pjm.1952.2.25 · [minidml.mathdoc.fr](#)
- [10] C.B. Morrey Jr. , Multiple integrals in the calculus of variations, Die Grundlehren der mathematischen Wissenschaften , Band 130 , Springer , Berlin (1966). MR 202511 | Zbl 0142.38701 · [Zbl 0142.38701](#)
- [11] F. Murat , Compacité par compensation , Ann. Scuola Norm. Sup. Pisa , 5 , (1978), pp. 489 - 507 . Numdam | MR 506997 | Zbl 0399.46022 · [Zbl 0399.46022](#) · [numdam:ASNSP_1978_4_5_3_489_0](#) · [eudml:83787](#)
- [12] F. Murat , Compacité par compensation II, in Proceedings of the international meeting on recent methods in non-linear analysis (Rome, may 1978), ed. by E. DE GIORGI, E. MAGENES and U. Mosco, Pitagora Editrice , Bologna (1979), pp. 245 - 256 . MR 533170 | Zbl 0427.35008 · [Zbl 0427.35008](#)
- [13] Y.G. Reshetnyak , On the stability of conformal mappings in multidimensional spaces , Siberian Math. J. , 8 (1967), pp. 69 - 85 . Zbl 0172.37801 · [Zbl 0172.37801](#) · doi:10.1007/BF01040573
- [14] Y.G. Reshetnyak , Stability theorems for mappings with bounded excursions , Siberian Math. J. , 9 (1968), pp. 499 - 512 . Zbl 0176.03503 · [Zbl 0176.03503](#) · doi:10.1007/BF01040914
- [15] L. Sarason , Remarks on an inequality by Schulenberger and Wilcox , Ann .Mat. Pura Appl. , 92 (1972), pp. 23 - 28 . MR 316868 | Zbl 0237.35012 · [Zbl 0237.35012](#) · doi:10.1007/BF02417933
- [16] J.R. Schulenberger - C.H. Wilcox , Coerciveness inequalities for nonelliptic systems of partial differential equations , Ann. Mat. Pura Appl. , 88 (1971), pp. 229 - 306 . MR 313887 | Zbl 0215.45302 · [Zbl 0215.45302](#) · doi:10.1007/BF02415070

- [17] J.R. Schulenberger - C.H. Wilcox , A coerciveness inequality for a class of nonelliptic operators of constant deficit , *Ann. Mat. Pura Appl.* , 92 (1972), pp. 77 - 84 . MR 316867 | Zbl 0237.35011 · Zbl 0237.35011 · doi:10.1007/BF02417937
- [18] L. Tartar , Cours Peccot , Collège de France , Paris , mars 1977 , non publié.
- [19] L. Tartar , Compensated compactness and applications to p.d.e., in *Non-linear Analysis and Mechanics, Heriot-Watt Symposium* , Vol. IV , ed. by R. J. KNOPS, Research Notes in Mathematics , No. 39 , Pitman , Londres (1979), pp. 136 - 212 . MR 584398 | Zbl 0437.35004 · Zbl 0437.35004
- [20] L. Van Hove , Sur l'extension de la condition de Legendre du calcul des variations aux intégrales multiples à plusieurs fonctions inconnues , *Koninkl. Ned. Akad. Wetenschap., Proc. of the section of Sc.* , 50 (1947), pp. 18 - 23 . MR 20223 | Zbl 0029.26802 · Zbl 0029.26802

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