

PUBBLICAZIONI MARIA AGOSTINA VIVALDI

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- 1) **Preface [Issue on variational convergence and degeneracies in PDES: fractal domains, composite media, dynamical boundary conditions]**. Discrete Contin. Dyn. Syst. Ser. S 12 (2019), no. 1, i. 35-06. In collaborazione con R. Capitanelli e M.R. Lancia.
- 2) **Regularity results for p-Laplacians in pre-fractal domains**. Advances in Nonlinear Anal.8 (2019), no. 1, 1043-1056. In collaborazione con R. Capitanelli e S. Fragapane.
- 3) **FEM for quasilinear obstacle problems in bad domains**. ESAIM Math. Model. Numer. Anal. 51 (2017), no. 6, 2465-2485. In collaborazione con R. Capitanelli.
- 4) **Absolutely minimizing Lipschitz extensions and infinity harmonic functions on the Sierpinski gasket**. Nonlinear Anal. 163 (2017), 71-85. In collaborazione con F. Camilli e R. Capitanelli.
- 5) **Dynamical Quasi-Filling Fractal Layers**. SIAM J. Math. Anal. 48 (2016), no. 6, 3931-3961. In collaborazione con R. Capitanelli.
- 6) **Asymptotic analysis of singular problems in perforated cylinders**. Differential Integral Equations 29 (2016), no. 5-6, 531-562. In collaborazione con D. Giachetti e B. Vernescu.
- 7) **Quasi-filling fractal layers**. Atti Accad. Naz. Lincei Rend. Lincei Mat. Appl. 26 (2015), no. 4, 465-473. In collaborazione con R. Capitanelli.
- 8) **Reinforcement problems for variational inequalities on fractal sets**. Calc. Var. Partial Differential Equations 54 (2015), no. 3, 2751-2783. In collaborazione con R. Capitanelli.
- 9) **Weighted estimates on fractal domains**. Mathematika 61 (2015), no. 2, 370-384. In collaborazione con R. Capitanelli.
- 10) **Layered fractal fibers and potentials**. J. Math. Pures Appl. (9) 103 (2015), no. 5, 1198-1227. In collaborazione con U. Mosco.

- 11) **Uniform weighted estimates on pre-fractal domains.** Discrete Contin. Dyn. Syst. Ser. B 19 (2014), no. 7, 1969-1985. In collaborazione con R. Capitanelli.
- 12) **Thin fractal fibers.** Math. Methods Appl. Sci. 36 (2013), no. 15, 2048-20682. In collaborazione con U. Mosco.
- 13) **Insulating layers of fractal type.** Differential Integral Equations 26 (2013), no. 9-10, 1055-1076. In collaborazione con R. Capitanelli e M.R. Lancia.
- 14) **On the Laplacean transfer across fractal mixtures.** Asymptot. Anal. 83 (2013), no. 1-2, 1-33. In collaborazione con R. Capitanelli.
- 15) **Mixed type, nonlinear systems in polygonal domains.** Atti Accad. Naz. Lincei Cl. Sci. Fis. Mat. Natur. Rend. Lincei (9) Mat. Appl. 24 (2013), no. 1, 39-81. In collaborazione con V.A. Solonnikov.
- 16) **Trace Theorems on scale irregular fractals.** In Classification and Applications of Fractals Nova Science Publishers 2012, 363-381. In collaborazione con R. Capitanelli.
- 17) **Insulating layers and Robin problems on Koch mixtures.** J. Differential Equations 251 (2011), no. 4-5, 1332-1353. In collaborazione con R. Capitanelli.
- 18) **Vanishing viscosity for fractal sets.** Discrete Contin. Dyn. Syst. 28 (2010), no. 3, 1207-1235. In collaborazione con U. Mosco.
- 19) **Irregular conductive layers.** In Analysis, partial differential equations and applications. Oper. Theory Adv. Appl., 193, Birkhuser Verlag, Basel, 2009, 303-318.
- 20) **Schauder estimates for a system of equations of mixed type.** Rend. Mat. Appl. (7) 29 (2009), no. 1, 117-132. In collaborazione con M.G. Garroni e V.A. Solonnikov.
- 21) **Fractal reinforcement of elastic membranes.** Arch. Ration. Mech. Anal. 194 (2009), no. 1, 49-74. In collaborazione con U. Mosco.
- 22) **Homogenization for conductive thin layers of pre-fractal type.** J. Math. Anal. Appl. 347 (2008), no. 1, 354-369. In collaborazione con M.R. Lancia e U. Mosco.
- 23) **Variational principles and transmission problems with fractal layers.** Mathematical modelling of bodies with complicated bulk and boundary behavior, 239-259, Quad. Mat., 20, Dept. Math., Seconda Univ. Napoli, Caserta, 2007.
- 24) **Fractal and Euclidean interaction in some transmission problems.** Matematiche (Catania) 62 (2007), no. 2, 327-343.
- 25) **An example of fractal singular homogenization.** Georgian Math. J. 14 (2007), no. 1, 169-193. In collaborazione con U. Mosco.
- 26) **Variational principles and transmission conditions for fractal**

- layers.** Fractal geometry and stochastics III, 205-217, Progr. Probab., 57, Birkhuser, Basel, 2004.
- 27) **Transmission problems with highly conductive fractal layers.** Far East J. Appl. Math. 15 (2004), no. 2, 151-170.
- 28) **Variational problems with fractal layers.** Rend. Accad. Naz. Sci. XL Mem. Mat. Appl. (5) 27 (2003), 237-251. 13 (2003), no. 1, 315-341. In collaborazione con U.Mosco.
- 29) **Asymptotic convergence of transmission energy forms.** Adv. Math. Sci. Appl. 13 (2003), no. 1, 315-341. In collaborazione con M.R.Lancia.
- 30) **On the regularity of the solutions for transmission problems.** Adv. Math. Sci. Appl. 12 (2002), no. 1, 455-466. In collaborazione con M.R.Lancia.
- 31) **The exponential behaviour of the Green function in a dihedral angle.** Commun. Contemp. Math. 3 (2001), no. 4, 571-592. In collaborazione con M.G. Garroni e V.A. Solonnikov.
- 32) **Lipschitz spaces and Besov traces on self-similar fractals.** Rend. Accad. Naz. Sci. XL Mem. Mat. Appl. (5) 23 (1999), 101-116. In collaborazione con M.R. Lancia.
- 33) **A Liouville type theorem for weighted elliptic equations.** Adv. Math. Sci. Appl. 9 (1999), no. 1, 183-207. In collaborazione con V. De Cicco.
- 34) **Existence and regularity results for oblique derivative problems for heat equations in an angle.** Proc. Roy. Soc. Edinburgh Sect. A 128 (1998), no. 1, 47-79. In collaborazione con M.G. Garroni e V.A. Solonnikov.
- 35) **Green function for the heat equation with oblique boundary conditions in an angle.** Dedicated to Ennio De Giorgi. Ann. Scuola Norm. Sup. Pisa Cl. Sci. (4) 25 (1997), no. 3-4, 455-485 (1998). In collaborazione con M.G. Garroni e V.A. Solonnikov.
- 36) **On the oblique derivative problem in an infinite angle.** Topol. Methods Nonlinear Anal. 7 (1996), no. 2, 299-325. In collaborazione con M.G. Garroni e V.A. Solonnikov.
- 37) **Harnack inequalities for Fuchsian type weighted elliptic equations.** Comm. Partial Differential Equations 21 (1996), no. 9-10, 1321-1347. In collaborazione con V. De Cicco.
- 38) **Existence and uniqueness results for degenerate-elliptic integro-differential problems.** Elliptic and parabolic problems (Pont-à-Mousson, 1994), 213-223, Pitman Res. Notes Math. Ser., 325, Longman Sci. Tech., Harlow, 1995.
- 39) **Nonlinear two-obstacle problems: pointwise regularity.** Rend. Mat. Appl. (7) 14 (1994), no. 3, 415-455. In collaborazione con I. Birindelli.

- 40) **Fully nonlinear boundary conditions for quasilinear, integro-differential operators.** Nonlinear partial differential equations and their applications. Collège de France Seminar, Vol. XI (Paris, 1989-1991), 97-117, Pitman Res. Notes Math. Ser., 299, Longman Sci. Tech., Harlow, 1994. In collaborazione con M.G. Garroni e V.A. Solonnikov.
- 41) **Problèmes intégro-différentiels complètement non linéaires.** (French) [Fully nonlinear integro-differential problems] C. R. Acad. Sci. Paris Sr. I Math. 316 (1993), no. 3, 245-248. In collaborazione con M.G. Garroni e V.A. Solonnikov.
- 42) **Quasi-linear, integro-differential, parabolic problems with non-homogeneous conditions.** Houston J. Math. 18 (1992), no. 4, 481-532. In collaborazione con M.G. Garroni e V.A. Solonnikov.
- 43) **Oscillation and energy decay of solutions to obstacle problems involving quasi-linear, degenerate-elliptic operators.** Progress in partial differential equations: elliptic and parabolic problems (Pont--Mousson, 1991), 259-273, Pitman Res. Notes Math. Ser., 266, Longman Sci. Tech., Harlow, 1992.
- 44) **Quasilinear, parabolic, integro-differential problems with nonlinear oblique boundary conditions.** Nonlinear Anal. 16 (1991), no. 12, 1089-1116. In collaborazione con M.G. Garroni.
- 45) **A pointwise regularity theory for the two-obstacle problem.** Acta Math. 163 (1989), no. 1-2, 57-107. In collaborazione con G. Dal Maso e U. Mosco.
- 46) **Stability of free boundaries.** Nonlinear Anal. 12 (1988), no. 12, 1339-1347. In collaborazione con M.G. Garroni.
- 47) **Nonlinear parabolic variational inequalities.** Proceedings of the International Workshop on Integral Functionals in the Calculus of Variations (Trieste, 1985). Rend. Circ. Mat. Palermo (2) Suppl. No. 15 (1987), 181-188.
- 48) **Nonlinear parabolic variational inequalities: existence of weak solutions and regularity properties.** Boll. Un. Mat. Ital. B (7) 1 (1987), no. 1, 259-274.
- 49) **Existence of strong solutions for nonlinear parabolic variational inequalities.** Nonlinear Anal. 11 (1987), no. 2, 285-295.
- 50) **On the Hölder continuity of bounded weak solutions of quasilinear parabolic inequalities.** Ann. Mat. Pura Appl. (4) 139 (1985), 175-189. In collaborazione con M. Struwe.
- 51) **Optimal impulse and continuous control with Hamiltonian of quadratic growth.** Contributions to operations research and mathematical economics, Vol. I, 59-105, Methods Oper. Res., 51, Athenäum/Hain/Hanstein, Königstein, 1984. In collaborazione con M. Matzeue U. Mosco.

- 52) **Bilateral evolution problems of nonvariational type: existence, uniqueness, Hölder-regularity and approximation of solutions.** Manuscripta Math. 48 (1984), no. 1-3, 39-69. In collaborazione con M.G. Garroni.
- 53) **Approximation results for bilateral nonlinear problems of non-variational type.** Nonlinear Anal. 8 (1984), no. 4, 301-312. In collaborazione con M.G. Garroni.
- 54) **Sur un problème de contrôle optimal stochastique continu et impulsif avec hamiltonien à croissance quadratique.** (French) [A stochastic continuous and impulse optimal control problem with quadratic growth Hamiltonian] C. R. Acad. Sci. Paris Sér. I Math. 296 (1983), no. 19, 817-820. In collaborazione con M. Matzeu e U. Mosco.
- 55) **A parabolic quasivariational inequality related to a stochastic impulse control problem with quadratic growth Hamiltonian.** Numer. Funct. Anal. Optim. 4 (1981/82), no. 3, 241-268.
- 56) **Bilateral inequalities and implicit unilateral systems of the non-variational type.** Manuscripta Math. 33 (1980/81), no. 2, 177-215. In collaborazione con M.G. Garroni.
- 57) **A dual estimate for the Hamilton-Jacobi function of a continuous and impulsive stochastic control problem.** Boll. Un. Mat. Ital. B (5) 17 (1980), no. 2, 458-477. In collaborazione con M. Matzeu.
- 58) **Existence, regularity and dual estimates for the solution of a quasivariational inequality relative to a quasilinear operator.** (Italian) Boll. Un. Mat. Ital. B (5) 16 (1979), no. 1, 154-167. In collaborazione con M.G. Garroni.
- 59) **Régularité de la solution forte de problèmes non linéaires d'évolution.** (French) Czechoslovak Math. J. 29(104) (1979), no. 3, 430-450. In collaborazione con M.G. Garroni.
- 60) **On the regular solution of a nonlinear parabolic quasivariational inequality related to a stochastic control problem.** Comm. Partial Differential Equations 4 (1979), no. 10, 1123-1147. In collaborazione con M. Matzeu.
- 61) **Existence of a regular solution of a quasivariational inequality in an unbounded domain.** Comm. Partial Differential Equations 3 (1978), no. 5, 443-470. In collaborazione con I. Capuzzo Dolcetta.
- 62) **Régularité de la solution forte d'un problème non linéaire d'évolution avec contraintes dépendantes du temps.** (French) C. R. Acad. Sci. Paris Sr. A-B 286 (1978), no. 4, A207-A210. In collaborazione con M.G. Garroni.
- 63) **Error estimates for the approximation of some unilateral problems.** RAIRO Anal. Numér. 11 (1977), no. 2, 197-208, 221. In collaborazione con F. Scarpini.

- 64) **Existence d'une solution régulière d'une inéquation quasi-variationnelle d'évolution avec conditions de Dirichlet.** (French) Boll. Un. Mat. Ital. A (5) 14 (1977), no. 3, 579-589. In collaborazione con P. Charrier.
- 65) **Evaluation de l'erreur d'approximation pour une inéquation parabolique relative aux convexes dépendant du temps.** (French) Appl. Math. Optim. 4 (1977-78), no. 2, 121-138. In collaborazione con F. Scarpini.
- 66) **Existence d'une solution régulière d'une inéquation quasi variationnelle elliptique sur un domaine non borné.** C. R. Acad. Sci. Paris Sér. A-B 284 (1977), no. 17, A1033-A1036. In collaborazione con I. Capuzzo Dolcetta.
- 67) **Existence d'une solution forte régulière d'une inéquation quasi variationnelle d'evolution.** (French) C. R. Acad. Sci. Paris Sr. A-B 283 (1976), no. 7, Aii, A465-A467. In collaborazione con P. Charrier.
- 68) **Strong discrete convergence of solutions of variational inequalities.** Rend. Mat. (6) 9 (1976), no. 1, 17-35. In collaborazione con E. Stroescu.