

Elenco delle pubblicazioni scientifiche e didattiche del prof. Giuseppe Di Fazio

Pubblicazioni scientifiche

1. *Hölder continuity of solutions for some Schrödinger equations*. Rend. Sem. Mat. Univ. Padova, **79** (1988) 173-183.
2. *Poisson equations and Morrey spaces* Journal of Mathematical Analysis and applications) **163** 1 (1992) 157-167. Nota alla quale è stato assegnato il Premio Japichino 1991.
3. (con M.A.Ragusa) *Commutators and Morrey spaces* Bollettino dell' U.M.I. (7) 5-A (1991) 323-332.
4. *On Dirichlet problem in Morrey spaces*. Journal of Diff. and integral equations. **6** n. 2 (1993) 383-391.
5. (con M.A.Ragusa) *Interior estimates in Morrey spaces for strong solutions to non divergence form equations with discontinuous coefficients*. Journal of Functional Analysis **112** n. 2 (1993) 241-256.
6. *Dirichlet problem Characterization of regularity*. Manuscripta Math. **84**, 47-56 (1994).
7. (con G.Citti) *Hölder continuity of the solutions for operators which are a sum of squares of vector fields plus a potential*. Proc. of the A.M.S. **122** (3) (1994), 741 - 750.
8. *Regolarità delle soluzioni generalizzate del problema di Dirichlet in ipotesi minime sui coefficienti* (Tesi di Dottorato).
9. *L^p estimates for divergence form elliptic equations with discontinuous coefficients* Boll. dell' U.M.I. (7) 10-A (1996), 409-420.
10. (con D.K.Palagachev) *Oblique derivative problem for elliptic equations in non divergence form with VMO coefficients* Comm. Math. Univ. Carolinae **37**, 3 (1996), 537-556.
11. (con D.K.Palagachev) *Oblique derivative problem for quasilinear elliptic equations with VMO coefficients* Bull. of the Australian Math. Soc. **53** (1996), 501-513.
12. *Problema di derivata obliqua per equazioni ellittiche lineari e quasi lineari a coefficienti discontinui* Boll. dell' U.M.I. (7) 11-A (1997), 567-577.
13. (con M.A.Ragusa e D.K.Palagachev) *On Morrey's Regularity of strong solutions to elliptic boundary value problems* Comptes Rendus de l' Acad. bulgare des Sciences, Tome N.50, n.7 (1997) 11-14
14. (con M.A.Ragusa e D.K.Palagachev) *Global Morrey Regularity of Strong solutions to the Dirichlet problem for elliptic equations with discontinuous coefficients* Journal of Functional Analysis **166**, (1999) 179-196
15. (con P.Zamboni) *Analytic Semigroups generated by an elliptic operator with discontinuous coefficients* Le Matematiche Volume LV (2000) - I - 115-120

16. (con P.Zamboni) *A Fefferman-Poincaré type inequality for Carnot-Carathéodory vector fields* Proc. of the AMS **130**, n.9, (2002) 2655-2660
17. (con P.Zamboni) *Hölder continuity for quasilinear subelliptic equations in Carnot-Carathéodory spaces* Math. Nachr. 272 (2004), 3-10;
18. (con P.Zamboni) *Unique continuation of nonnegative solutions to quasilinear subelliptic equations in Carnot-Carathéodory spaces* Comm. on applied nonlinear analysis vol.10 (2003),n.2, 97-105;
19. (con M.S. Fanciullo) *Gradient estimates for solutions of elliptic systems in Carnot-Carathéodory spaces* Commentationes Mathematicae Universitatis Carolinae **43**,4 (2002) 605-618
20. (con M.S. Fanciullo) *BMO Gradient estimates for solutions of elliptic systems in Carnot-Carathéodory spaces* Comm. on applied nonlinear analysis vol.10 (2003), n.2, 81-95
21. (con P.Zamboni) *Fefferman-Poincaré inequality and regularity for quasilinear subelliptic equations* Lecture Notes of Seminario Interdisciplinare di Matematica **3**, (2004) 103-122.
22. (con P.Zamboni) *Local regularity of solutions to quasilinear subelliptic equations in Carnot Carathéodory spaces* Boll. Unione Mat. Ital. Sez. B Artic. Ric. Mat. (8) 9 (2006), no. 2, 485–504.
23. (con P.Zamboni) *Regularity for quasilinear degenerate elliptic equations* Math.Z. -Volume 253, Number 4 / August, (2006) DOI: 10.1007/s00209-006-0933-y
24. (con M.S.Fanciullo, J.Manfredi, A.Domokos) *Subelliptic Cordes estimates in the Grušin plane* Manuscripta Mathematica Vol. 120, Number 4 / August, 2006 pp.419-433.
25. (con P.Zamboni) *Strong A_∞ weights and quasilinear elliptic equations.* Matematiche (Catania) 60 (2005), no. 2, 513–518 (2006). 35J60 (35J70)
26. (con A. Domokos, M.S. Fanciullo, J.J. Manfredi) *$C_{loc}^{1,\alpha}$ regularity for subelliptic p -harmonic functions in Grušin plane.* Matematiche (Catania) 60 (2005), no. 2, 469–473 (2006). 35H20 (35B65)
27. (con C.E.Gutiérrez, E.Lanconelli) *Analysis on metric spaces and applications to PDE's.* Matematiche (Catania) 60 (2005), no. 2, 461–468 (2006). 35J70 (35B45)
28. (con C. Gutierrez, E. Lanconelli) *Covering Theorems, Inequalities on Metric Spaces and applications to PDE's* Math. Annalen (2008) - Vol. 341, n. 2 pp. 255-291 (2008);
29. (con M.S. Fanciullo, P.Zamboni) *Harnack inequality and smoothness for quasilinear degenerate elliptic equations* Journal of differential equations 245 , pp. 2939 - 2957 (2008);
30. (con P.Zamboni) *Unique continuation for positive solutions of degenerate elliptic equations* Math. Nachr. Band 282, Nr. 12 (2009) oder in Band 283, Nr. 1 (2010).
31. (con M.S. Fanciullo, P.Zamboni) *Harnack inequality and smoothness for quasilinear degenerate elliptic equations* Math. Z. vol. 214 (2010) pp.679-695 DOI: 10.1007/s00209-009-0485-z

32. (con M.S. Fanciullo, P.Zamboni) *Harnack inequality for a class of strongly degenerate elliptic operators formed by Hörmander vector fields* Man. Math. vol. 135 (2011) pp. 361-180
33. (con M.S. Fanciullo, P.Zamboni) *Interior L^p estimates for degenerate elliptic equations in divergence form with VMO coefficients* Differential and Integral equations vol. 25 n.7-8 (2012) pp. 619 - 628
34. (con M.S. Fanciullo, P.Zamboni) *Regularity for a class of strongly degenerate quasi linear elliptic operators* Journal of Differential equations vol. 255 (2013) pp. 3920 - 3939
35. (con M.S. Fanciullo, P.Zamboni) *Hölder regularity for non divergence form elliptic equations with discontinuous coefficients* Journal of Mathematical Analysis vol. 407 (2013) pp. 545 - 549
36. (con M.S. Fanciullo) $W_{loc}^{2,p}$ estimates for Cordes non linear operators in the Heisenberg group Journal of Mathematical Analysis vol. 411 (2014) pp.947 - 952
37. (con M.S. Fanciullo, P.Zamboni) L^p estimates for degenerate elliptic systems with VMO coefficients Algebra i Analyze Tom 25 (2013) n.6

Pubblicazioni didattiche

1. (con M.Frasca) *Metodi Matematici per l'Ingegneria* – Ed. Monduzzi (2003).
2. (con P.Zamboni) *Analisi Matematica Uno* – Ed. Monduzzi (2007).
3. (con P.Zamboni) *Analisi Matematica Due* – Ed. Monduzzi (2008).
4. (con P.Zamboni) *Analisi Matematica Uno* – seconda edizione - Ed. Monduzzi (2013).
5. (con P.Zamboni) *Esercizi di Analisi Matematica Uno* – Ed. Edises (2013).

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