

List of publications

- [1] C. Leone, A. Porretta, *Entropy solutions for nonlinear elliptic equations in L^1* , **Nonlinear Anal. T.M.A.** 32, n. 3, pp. 325–334 (1998).
- [2] A. Porretta, *Regularity for entropy solutions of a class of parabolic equations with non regular initial datum*, **Dynam. Systems Appl.** 7, pp. 53–72 (1998).
- [3] A. Porretta, *Uniqueness and homogenization for a class of non coercive operators in divergence form*, **Atti Sem. Mat. Fis. Univ. Modena**, Supplemento al Volume XLVI (1998), pp. 915–936.
- [4] A. Porretta, *Asymptotic behaviour of elliptic variational inequalities with measure data*, **Appl. Anal.** 73 (1999), pp. 359–377.
- [5] A. Porretta, *Existence results for nonlinear parabolic equations via strong convergence of truncations*, **Ann. Mat. Pura Appl. (IV)** 177 (1999), pp. 143–172.
- [6] A. Porretta, *Existence for elliptic equations in L^1 having lower order terms with natural growth*, **Portugal. Math.** 57 (2000), pp. 179–190.
- [7] A. Porretta, *Some remarks on the regularity of solutions for a class of elliptic equations with measure data*, **Houston J. Math.** 26 (2000), pp. 183–213.
- [8] A. Porretta, *Local existence and uniqueness of weak solutions for nonlinear parabolic equations with superlinear growth and unbounded initial data*, **Adv. Differential Equations** 6 (2001), pp. 73–128.
- [9] L. Orsina, A. Porretta, *Strong stability results for nonlinear elliptic equations with respect to very singular perturbation of the data*, **Commun. Contemp. Math.** 3 (2001), pp. 259–285.
- [10] D. Blanchard, A. Porretta, *Nonlinear parabolic equations with natural growth terms and measure initial data*, **Ann. Scuola Norm. Sup. Pisa Cl. Sci. (4)** 30 (2001), no. 3-4, 583–622.
- [11] A. Porretta, *A note on the bifurcation of solutions for an elliptic sublinear problem*, **Rend. Sem. Mat. Univ. Padova** 107 (2002), n.2, 153–164.
- [12] C. Mascia, A. Porretta, A. Terracina, *Nonhomogeneous Dirichlet problems for degenerate parabolic–hyperbolic equations*, **Arch. Ration. Mech. Anal.** 163 (2002), 87–124.
- [13] F. Murat, A. Porretta, *Stability properties, existence and nonexistence of renormalized solutions for elliptic equations with measure data*, **Comm. Partial Differential Equations** 27, n. 11 & 12 (2002), 2267–2310.

- [14] A. Porretta, *Nonlinear equations with natural growth terms and measure data*, 2002-Fez Conference on Partial Differential Equations, **Electron. J. Diff. Eqns.** Conf. 09 (2002), 183–202.
- [15] J. Droniou, A. Porretta, A. Prignet, *Parabolic capacity and soft measures for nonlinear equations*, **Potential Analysis** 19 (2003), 99–161.
- [16] J. Casado-Díaz, A. Porretta, *Existence and comparison of maximal and minimal solutions for pseudomonotone elliptic problems in L^1* , **Nonlinear Anal. T.M.A.** 53 (2003), 351–373.
- [17] A. Porretta, J. Vovelle, *L^1 solutions to first order hyperbolic equations in bounded domains*, **Comm. Partial Differential Equations** 28, 1 & 2, (2003), 381–408.
- [18] A. Porretta, *Uniqueness of solutions for some nonlinear Dirichlet problems*, **NODEA, Nonlin. Anal. Diff. Eq. and Appl.** 11 (2004).
- [19] A. Porretta, *Some uniqueness results for elliptic equations without condition at infinity*, **Commun. Contemporary Mathematics** 5, n. 5 (2003), 705–717.
- [20] L. Boccardo, L. Orsina, A. Porretta *Some noncoercive parabolic equations with lower order terms in divergence form*, **Journal of Evolution Equations** 3 (2003), 407–418.
- [21] J. Casado-Díaz, F. Murat, A. Porretta, *Uniqueness of the Neumann condition and comparison results for Dirichlet pseudomonotone problems*, in *The first 60 years of nonlinear analysis of Jean Mawhin*, 27–40, World Sci. Publishing, River Edge, NJ, 2004.
- [22] A. Porretta, *Local estimates and large solutions for some elliptic equations with absorption*, **Advances in Diff. Equations** 9, n. 3–4 (2004), 329–351.
- [23] A. Porretta, *Absorption effects for some elliptic equations with singularities*, in “*Atti del Convegno UMI di Milano 2003*”, **Boll. UMI Sez. B (8)** 8 (2005), 369–395.
- [24] A. Porretta, L. Véron, *Symmetry properties of solutions of semilinear elliptic equations in the plane*, **Manuscripta Math.** 115 (2004), no. 2, 239–258.
- [25] D. Blanchard, A. Porretta, *Stefan problems with nonlinear diffusion and convection*, **J. Differential Equations** 210 (2005), no. 2, 383–428.
- [26] A. Porretta, S. Segura de Leon, *Nonlinear elliptic equations having a gradient term with natural growth*, **J. Math. Pures et Appl.** 85, n.3 (2006), 465–492.
- [27] N. Grenon, F. Murat, A. Porretta, *Existence and a priori estimate for elliptic problems with subquadratic gradient dependent terms*, **C. R. Acad. Sci. Paris, Ser. I** 342 (2006), 23–28.

- [28] G. Barles, A. Porretta, *Uniqueness for unbounded solutions to stationary viscous Hamilton–Jacobi equations*, **Ann. Scuola Norm. Sup. di Pisa Cl. Sci.** (5) 5 (2006), 107–136.
- [29] A. Porretta, L. Véron, *Symmetry of large solutions of nonlinear elliptic equations in a ball*, **J. Functional Analysis** 236 (2006), 581–591.
- [30] L. Dupaigne, A.C. Ponce, A. Porretta, *Elliptic equations with vertical asymptotes in the nonlinear term*, **J. Anal. Math.** 98 (2006), 349–396.
- [31] C. Mascia, A. Porretta, A. Terracina, *Qualitative behaviour for one-dimensional strongly degenerate parabolic problems*, **Interfaces and Free Boundaries** 8 (2006), 263–280.
- [32] A. Porretta, L. Véron, *Asymptotic behaviour for the gradient of large solutions to some nonlinear elliptic equations*, **Advanced Nonlinear Studies** 6 (2006), 351–378.
- [33] J. Casado–Díaz, F. Murat, A. Porretta, *Uniqueness results for pseudomonotone problems with $p > 2$* , **C. R. Math. Acad. Sci. Paris** 344 (2007), no. 8, 487–492.
- [34] A. Porretta, *Remarks on existence or loss of minima of infinite energy*, **Asymptot. Anal.** 52 (2007), no. 1-2, 53–94.
- [35] T. Leonori, A. Porretta, *The boundary behavior of blow-up solutions related to a stochastic control problem with state constraint*, **Siam J. Math. Anal.** 39 (2007/08), n. 4, 1295–1327.
- [36] F. Petitta, A.C. Ponce, A. Porretta, *Approximation of diffuse measures for parabolic capacities*, **C.R. Acad. Sci. Paris, Ser. I**, 346 (2008), 161–166.
- [37] L. Boccardo, L. Orsina, A. Porretta *Existence of finite energy solutions for elliptic systems with L^1 valued nonlinearities*, **Math. Models and Methods in Applied Sci.** 18, n. 5 (2008), 669–687.
- [38] A. Porretta, *On the comparison principle for p -Laplace type operators with first order terms*, in “On the notions of solution to nonlinear elliptic problems: results and developments”, 459–497, **Quad. Mat.** **23**, Dept. Math., Seconda Univ. Napoli, Caserta (2008).
- [39] C. Cancès, T. Gallouët, A. Porretta, *Two-phase flows involving capillary barriers in heterogeneous porous media*, **Interfaces and Free Boundaries** 11, n. 2 (2009), 239–258.
- [40] A. Porretta, L. Véron, *Separable p -harmonic functions in a cone and related quasilinear equations on manifolds*, **J. European Math. Soc.** 11 (2009), 1285–1305.

- [41] I. Capuzzo Dolcetta, F. Leoni, A. Porretta, *Hölder estimates for degenerate elliptic equations with coercive Hamiltonians*, **Trans. Amer. Math. Soc.** 362 (2010), 4511–4536.
- [42] A. Porretta, *The “ergodic limit” for a viscous Hamilton-Jacobi equation with Dirichlet conditions*, **Atti Accad. Naz. Lincei Cl. Sci. Fis. Mat. Natur. Rend. Lincei (9) Mat. Appl.** 21 (2010), 59–78.
- [43] D. Arcoya, L. Boccardo, T. Leonori, A. Porretta, *Some elliptic problems with singular natural growth lower order terms*, **J. Differential Equations** 249 (2010), 2771–2795.
- [44] G. Barles, A. Porretta, T. Tabet Tchamba, *On the Large Time Behavior of Solutions of the Dirichlet problem for Subquadratic Viscous Hamilton-Jacobi Equations*, **J. Math. Pures Appl.** 94 (2010), 497–519.
- [45] F. Petitta, A.C. Ponce, A. Porretta, *Diffuse measures and nonlinear parabolic equations*, **J. Evol. Equ.** 11 (2011), 861–905.
- [46] T. Leonori, A. Porretta, *Gradient bounds for elliptic problems singular at the boundary*, **Arch. Rat. Mech. Anal.** 202 (2011), n.2, 663–705.
- [47] A. Porretta, E. Zuazua, *Null controllability of viscous Hamilton-Jacobi equations*, **Ann. I.H.P. Analyse Nonlinéaire** 29 (2012), 301–333.
- [48] P. Cardaliaguet, J.-M. Lasry, P.-L. Lions, A. Porretta, *Long time average of mean field games*, **Network Heterogeneous Media** 7 (2012), n.2, 279–301.
- [49] A. Porretta, L. Véron, *Separable solutions of quasilinear Lane-Emden equations*, **J. Europ. Math. Soc.** 15 (2013), 755–774.
- [50] L. Boccardo, A. Porretta, *Uniqueness for elliptic problems with Hölder-type dependence on the solution*, **Comm. Pure Appl. Anal.** 12 (2013), 1569–1585.
- [51] P. Cardaliaguet, J.-M. Lasry, P.-L. Lions, A. Porretta, *Long time average of mean field games with a nonlocal coupling*, **Siam J. Control Optimization** 51 n. 5 (2013), 3558–3591.
- [52] A. Porretta, E. Priola, *Global Lipschitz regularizing effects for linear and nonlinear parabolic equations*, **J. Math. Pures Appl. (9)** 100 (2013), no. 5, 633–686.
- [53] A. Porretta, *On the planning problem for a class of Mean Field Games*, **C. R. Math. Acad. Sci. Paris** 351 (2013), no. 11-12, 457–462.
- [54] A. Porretta, E. Zuazua, *Long time versus steady state optimal control*, **Siam J. Control Optimization** 51 n. 6 (2013), 4242–4273.

- [55] N. Grenon, F. Murat, A. Porretta, *A priori estimates and existence for elliptic equations with gradient dependent terms*, **Ann. Scuola Normale Sup. Pisa Cl. Sci. (V)** XIII (2014), 137–205.
- [56] A. Porretta, *On the planning problem for the Mean Field Games system*, **Dynamic Games and Applications** 4, n.2 (2014), 231–256.
- [57] A. Dall’Aglio, A. Porretta, *Local and global regularity of weak solutions of elliptic equations with superquadratic Hamiltonian*, **Trans. Amer. Math. Soc.** 367 (2015), 3017-3039.
- [58] H. Berestycki, I. Capuzzo Dolcetta, A. Porretta, L. Rossi, *Maximum Principle and generalized principal eigenvalue for degenerate elliptic operators*, **J. Math. Pures Appl.** 103 (2015), no. 5, 1276-1293.
- [59] F. Petitta, A. Porretta, On the notion of renormalized solution to nonlinear parabolic equations with general measure data, **J. of Elliptic and Parabolic Equations** 1 (2015), 201-214.
- [60] A. Porretta, *Weak solutions to Fokker-Planck equations and Mean Field Games*, **Arch. Rational Mech. Anal.** 216 (2015), 1-62.
- [61] P. Cardaliaguet, J. Graber, A. Porretta, D. Tonon, *Second order mean field games with degenerate diffusion and local coupling*, **NoDEA** 22 (2015), 1287-1317.
- [62] P. Cardaliaguet, A. Porretta, D. Tonon, *Sobolev regularity for the first order Hamilton-Jacobi equation*, **Calc. Var. Partial Differential Equations** 54 (2015), 3037-3065.
- [63] T. Leonori, A. Porretta, G. Riey, *Comparison principles for p -Laplace equations with lower order terms*, **Ann. Mat. Pura Appl.** (2016), 1-27.
- [64] L. Boccardo, L. Orsina, A. Porretta, *Strongly coupled elliptic equations related to mean-field games systems*, **J. Differential Equations** 12 (2016), 1796-1834.
- [65] Y. Achdou, A. Porretta, *Convergence of a finite difference scheme to weak solutions of the system of partial differential equation arising in mean field games*, **SIAM J. Numer. Anal.** 54 (2016), 161-186.
- [66] T. Leonori, A. Porretta, *Large solutions and gradient bounds for quasilinear elliptic equations*, **Comm. Partial Differential Equations**, 41 (2016), 952-998.
- [67] A. Porretta, P. Souplet, *The Profile of Boundary Gradient Blowup for the Diffusive Hamilton-Jacobi Equation*, **International Mathematics Research Notices** (2016), 1-42.
- [68] A. Porretta, *On the weak theory for mean field games systems*, **Boll. Unione Mat. Ital.** 10 (2017), 411-439.

- [69] A. Porretta, P. Souplet, *Analysis of the loss of boundary condition for a viscous Hamilton-Jacobi equation*, **Ann. I. H. Poincaré -AN** 34 (2017), 1913-1923.
- [70] A. Porretta, E. Zuazua, *Numerical hypocoercivity for the Kolmogorov equation*, **Math. of Comp.** 86 (2017), 97-119.
- [71] Y. Achdou, A. Porretta, *Mean field games with congestion*, **Ann. I. H. Poincaré -AN** 35 (2018), 443-480.
- [72] M. Maggiocca, A. Porretta, *Local and global time decay for parabolic equations with superlinear first order terms*, **Proc. of the London Math. Soc.** 118 (2018), 473-542.
- [73] A. Porretta, *On the turnpike property in mean field games*, **Minimax Theory and Appl.** 3 (2018), 285-312.
- [74] P. Cardaliaguet, A. Porretta, *Long time behavior of the master equation in mean field games*, **Analysis and PDE** 12 (2019), 1397-1454.
- [75] A. Porretta, P. Souplet, *Blow-up and regularization rates, loss and recovery of boundary conditions for the superquadratic viscous Hamilton-Jacobi equation*, **J. Math. Pures et Appl.**, to appear (preprint arxiv: 1811.01612).
- [76] A. Porretta, M. Ricciardi, *Mean field games under invariance conditions for the state space*, **Comm. P.D.E.**, to appear (preprint arxiv: 1903.06491).
- [77] C. Orrieri, A. Porretta, G. Savaré, *A variational approach to the mean field planning problem*, **J. Funct. Anal.**, to appear (preprint arxiv: 1807.09874).
- [78] A. Porretta, On the regularity of the total variation minimizers, **Comm. Contemp. Math.**, to appear.

Altre pubblicazioni:

A. Porretta: “*Apologia di un matematico*”. *La difesa di G.H. Hardy - resa spontaneamente*. In: Mnemosyne, o la costruzione del senso n. 6 (2013), UCL Presses Universitaire de Louvain (Belgio). Available in open access at
<https://ojs.uclouvain.be/index.php/Mnemosyne/article/view/13613>