

Augusto C. Ponce

List of Publications

- [1] Augusto C. Ponce, *Elliptic PDEs, Measures and Capacities. From the Poisson equation to Nonlinear Thomas-Fermi problems*. EMS Tracts in Mathematics. European Mathematical Society (EMS), Zürich, 2016. 463 pp. Winner of the 2014 EMS Monograph Award.
- [1a] Augusto C. Ponce, *Selected problems on elliptic equations involving measures* (2012). Available at <http://arxiv.org/pdf/1204.0668>, 143 pp. Winner of the Concours 2012 in Mathematics of the Académie royale de Belgique.
- [2] Luigi Orsina and Augusto C. Ponce, *Strong maximum principle for Schrödinger operators with singular potential*, Ann. Inst. H. Poincaré Anal. Non Linéaire **33** (2016), 477–493.
- [3] Augusto C. Ponce and Daniel Spector, *On formulae decoupling the total variation of BV functions*, Nonlinear Anal., in press.
- [4] Pierre Bousquet, Augusto C. Ponce and Jean Van Schaftingen, *Strong density for higher order Sobolev spaces into compact manifolds*, J. Eur. Math. Soc. (JEMS) **17** (2015), 763–817.
- [5] Pierre Bousquet, Augusto C. Ponce and Jean Van Schaftingen, *Strong density of fractional Sobolev maps*, J. Fixed Point Theory Appl. **15** (2014), 133–153.
- [6] Pierre Bousquet, Augusto C. Ponce and Jean Van Schaftingen, *Density of smooth maps for fractional Sobolev spaces $W^{s,p}$ into ℓ simply connected manifolds when $s \geq 1$* , Confluentes Math. **5** (2013), 3–22.
- [7] Augusto C. Ponce, *Singularities of the divergence of continuous vector fields and uniform Hausdorff estimates*, Indiana Univ. Math. J. **62** (2013), 1055–1074.
- [8] Augusto C. Ponce and Adilson Presoto, *Limit solutions of the Chern-Simons equation*, Nonlinear Anal. **84** (2013), 91–102.
- [9] Luigi Orsina and Augusto C. Ponce, *Nonexistence of solutions for the 1 Laplacian with L^N data* (2012). Available at <http://arxiv.org/pdf/1207.6480>.
- [10] Francesco Petitta, Augusto C. Ponce and Alessio Porretta, *Diffuse measures and nonlinear parabolic equations*, J. Evol. Eq. **11** (2011), 861–905.
- [10a] Francesco Petitta, Augusto C. Ponce and Alessio Porretta, *Approximation of diffuse measures for parabolic capacities*, C. R. Acad. Sci. Paris, Ser. I **346** (2008), 161–166.
- [11] Marie-Françoise Bidaut-Véron, Augusto C. Ponce et Laurent Véron, *Boundary singularities of positive solutions of some nonlinear elliptic equations*, Calc. Var. Partial Differential Equations **40** (2011), 183–221.
- [11a] Marie-Françoise Bidaut-Véron, Augusto C. Ponce and Laurent Véron, *Boundary singularities of positive solutions of some nonlinear elliptic equations*, C. R. Acad. Sci. Paris, Ser. I **344** (2007), 83–88.
- [12] Moshe Marcus and Augusto C. Ponce, *Reduced limits for nonlinear equations with measures*, J. Funct. Anal. **258** (2010), 2316–2372.
- [13] Augusto C. Ponce and Jean Van Schaftingen, *Closure of smooth maps in $W^{1,p}(B^3; S^2)$* , Diff. Int. Eq. **22** (2009), 881–900.

- [14] Haïm Brezis and Augusto C. Ponce, *Kato's inequality up to the boundary*, Commun. Contemp. Math. **10** (2008), 1217–1241.
- [15] Pierre Bousquet, Augusto C. Ponce and Jean Van Schaftingen, *A case of density in $W^{2,p}(M; N)$* , C. R. Math. Acad. Sci. Paris **346** (2008), 735–740.
- [16] Luigi Orsina and Augusto C. Ponce, *Semilinear elliptic equations and systems with diffuse measures*, J. Evol. Eq. **8** (2008), 781–812.
- [17] Juan Dávila and Augusto C. Ponce, *Hausdorff dimension of rupture sets and removable singularities*, C. R. Acad. Sci. Paris, Ser. I **346** (2008), 27–32.
- [18] Marcelo Montenegro and Augusto C. Ponce, *The sub-supersolution method for weak solutions*, Proc. Amer. Math. Soc. **136** (2008), 2429–2438.
- [19] Chang-Shou Lin, Augusto C. Ponce and Yisong Yang, *A system of elliptic equations arising in Chern-Simons Field Theory*, J. Funct. Anal. **247** (2007), 289–350.
- [20] Augusto C. Ponce and Jean Van Schaftingen, *The continuity of functions with N -th derivative measure*, Houston J. Math. **33** (2007), 927–938.
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- [23] Louis Dupaigne, Augusto C. Ponce and Alessio Porretta, *Elliptic equations with vertical asymptotes in the nonlinear term*, J. Anal. Math. **98** (2006), 349–396.
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- [29] Haïm Brezis, Petru Mironescu and Augusto C. Ponce, *$W^{1,1}$ -maps with values into S^1* . Geometric Analysis of PDE and Several Complex Variables (S. Chanillo, P. Cordaro, N. Hanges and A. Meziani, eds.), Contemporary Mathematics, 368, Amer. Math. Soc., Providence, RI, 2004, pp. 69–100.

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