

Augusto C. Ponce

Université catholique de Louvain
Institut de recherche en mathématique et physique
Chemin du cyclotron 2, L7.01.02
1348 Louvain-la-Neuve, Belgium
Augusto.Ponce@uclouvain.be
<http://perso.uclouvain.be/augusto.ponce/>

Personal

Born on August 6, 1977

Belgian–Brazilian nationalities, married, two children

Education

Ph.D. Mathematics : Rutgers, The State University of New Jersey, 2005

Doctorat Mathématiques appliquées : Université Pierre et Marie Curie (Paris 6), 2004

M.Sc. Mathematics : Universidade Estadual de Campinas, 2000

B.S. Mathematics : Universidade Estadual de Campinas, 1998

Appointments

Professeur : Université catholique de Louvain, since 2015

Chargé de cours : Université catholique de Louvain, 2008–2015

Maître de conférences : Université François Rabelais (Tours, France), 2005–2008

Visiting member : Institute for Advanced Study (Princeton, NJ), 2004–2005

Research

Geometric Analysis : Sobolev maps between manifolds

Nonlinear elliptic PDEs : connection with Measure Theory

Removable singularities and unique continuation principles

Selected 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. *EMS Monograph Award 2014*

[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] 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.
- [4] Moshe Marcus and Augusto C. Ponce, *Reduced limits for nonlinear equations with measures*, J. Funct. Anal. **258** (2010), 2316–2372.
- [5] 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.
- [6] Augusto C. Ponce, *An estimate in the spirit of Poincaré’s inequality*, J. Eur. Math. Soc. (JEMS) **6** (2004), 1–15.

Awards

EMS Monograph Award, 2014

Concours in Mathematics of the Académie royale de Belgique, 2012

Dean’s Award for Excellence in Research, Rutgers University, 2003–2004

Fellowships and grants

Fonds de mobilité Amérique latine, WBI, 2014

Crédit de recherche, FNRS, 2009–2012 ; 2013–2014 ; 2015–2016

Fonds spéciaux de recherche, UCL, 2008–2009

Prime d’encadrement doctoral et de recherche, CNU, 2007–2008

Fellowship IAS–NSF–Sergio Serapioni, 2004–2005

Invitations

Brazil : Universidade de São Paulo, Universidade Estadual de Campinas, IMPA

Chile : Universidad de Chile

France : Université de Toulouse, Université de Lyon 1, Aix-Marseille Université

Israel : Technion

Italy : Università di Roma “La Sapienza”, SISSA (Trieste)

Spain : Universidad Autónoma de Madrid

Taiwan : Taiwan National University, National Chiao Tung University

United Kingdom : Swansea University

USA : Kansas State University

Minicourses (M.Sc./Ph.D. levels)

Sobolev maps with values into manifolds : a toolbox

School on Nonlinear function spaces in Mathematics and Physical Sciences, Lyon, 2015

Topics in elliptic PDEs and measure theory

Universidade de São Paulo, São Carlos, 2014

Capacitary estimates and trace inequalities

Sapienza—Università di Roma, 2013

Measure theory with applications to PDEs

Universidade Estadual de Campinas, 2008

Topics on calculus of variations

School on Nonlinear Differential Equations, Trieste, 2006

Classical methods in potential theory

II Escola Brasileira de Equações Diferenciais, Rio de Janeiro, 2006