

Abridged Curriculum Vitae

- José Miguel Urbano; born in Coimbra, Portugal, in 1970.
- Full Professor, Department of Mathematics, University of Coimbra (since 2009).
<http://www.mat.uc.pt/~jmurb>
- BS in Pure Mathematics, University of Coimbra, 1992; PhD in Mathematical Analysis, University of Lisbon, 1999; *Agregação* in Mathematics, University of Coimbra, 2005.
- Long-term visits: Ecole Polytechnique (Paris) in 1995 and Northwestern University (Chicago) in 1999.
- Prizes: José Anastácio da Cunha (*ex aequo*, 2002), Gulbenkian Program *Estímulo à Investigação* (1998), João Farinha (1992), Gold medal in the Portuguese Mathematical Olympiad (1988).
- Special Visiting Researcher of the Brazilian program *Science Without Borders* [2013–2015].
- Member of the *National Council for Science and Technology* (CNCT) [2012–2015], chaired by the Prime-Minister of Portugal.
- Member of the Scientific Council for the Exact Sciences and Engineering of *Fundação para a Ciência e a Tecnologia* (FCT) [2013–2016].
- Member of the Steering Committee of the Gulbenkian Program *Novos Talentos em Matemática* [2000–].
- Scientific Director of the Carnegie Mellon|Portugal ICTI Program [2014–2018].
- Member of the Advisory Board of the UTexas–Austin|Portugal CoLab Program [2014–2018].
- Director of the Centre for Mathematics of the University of Coimbra (CMUC) [2007–2011], Vice-President of the Portuguese Mathematical Society (SPM) [2006–2008], member of the Executive Board of the International Centre for Mathematics (CIM–member of ERCOM) [2004–2008], member of the Scientific Council of the *Faculdade de Ciências e Tecnologia da Universidade de Coimbra* (FCTUC) [2009–2013].
- Main research interests: Nonlinear Partial Differential Equations; Free Boundary Problems.
- Principal Investigator (PI) of five research projects evaluated by FCT [Total funding: around 900K Euros].
- Member of the editorial board of *Nonlinear Analysis: Theory, Methods & Applications*.
- Supervisor of five MS thesis, four PhD thesis and ten Post-Doctoral Fellows.
- Short courses at IMPA (Rio de Janeiro, Brazil), the University of Florence (Italy), Aalto University (Finland), the Federal University of Ceará (Fortaleza, Brazil) and KAUST (Saudi Arabia).
- Evaluator of grants and research projects for EU (Marie-Curie Fellowships), ERC (Starting Grants), the Academy of Finland and FCT.
- Invited speaker in 20+ international conferences; member of several PhD committees abroad (Amiens, Bonn, Concepción, Erlangen-Nürnberg, Fortaleza, Helsinki, Jyväskylä, Pavia, Rome); 35+ research seminars.
- Co-organizer of the CIM Thematic Term *Mathematics and the Environment* (2004), the International Conference *Trends in Partial Differential Equations of Mathematical Physics* (2003), the CIM/UC Summer School *Topics in Nonlinear PDEs* (2007) and the *69th European Study Group with Industry* (2009).
- Author of one book; editor of two books; around 60 research publications.

Main Research Publications

- *The Method of Intrinsic Scaling*
Lecture Notes in Mathematics, Vol. 1930, Springer, 2008.
- *Current issues on singular and degenerate evolution equations*
(with E. DiBenedetto and V. Vespri)
in: **Handbook of Differential Equations**, Evolutionary Equations, vol. 1, pp. 169–286,
Elsevier, 2004.
- *Sharp regularity for the inhomogeneous porous medium equation*
(with D. Araújo and A.F. Maia)
J. Anal. Math., to appear.
- *A proof of the $C^{p'}$ -regularity conjecture in the plane*
(with D. Araújo and E.V. Teixeira)
Adv. Math. 316 (2017), 541–553.
- *On the bulk velocity of Brownian ratchets*
(with S. Kondratyev and D. Vorotnikov)
SIAM J. Math. Anal. 48 (2016), 950–980.
- *Regularity for anisotropic fully nonlinear integro-differential equations*
(with L. Caffarelli and R. Leitão)
Math. Ann. 360 (2014), 681–714.
- *A quantitative modulus of continuity for the two-phase Stefan problem*
(with P. Baroni and T. Kuusi)
Arch. Rational Mech. Anal. 214 (2014), 545–573.
- *A geometric tangential approach to sharp regularity for degenerate evolution equations*
(with E.V. Teixeira)
Anal. PDE 7 (2014), 733–744.
- *Hölder continuity for Trudinger’s equation in measure spaces*
(with T. Kuusi, R. Laleoglu and J. Siljander)
Calc. Var. Partial Differential Equations 45 (2012), 193–229.
- *$p(x)$ -Harmonic functions with unbounded exponent in a subdomain*
(with J.J. Manfredi and J.D. Rossi)
Ann. Inst. H. Poincaré Anal. Non Linéaire 26 (2009), 2581–2595.
- *Entropy solutions for the $p(x)$ -Laplace equation*
(with M. Sanchón)
Trans. Amer. Math. Soc. 361 (2009), 6387–6405.
- *On a two-sidedly degenerate chemotaxis model with volume-filling effect*
(with M. Bendahmane and K.H. Karlsen)
Math. Models Methods Appl. Sci. 17 (2007), 783–804.
- *On the doubly singular equation $\gamma(u)_t = \Delta_p u$*
(with E. Henriques)
Comm. Partial Differential Equations 30 (2005), 919–955.
- *Uniqueness for nonlinear degenerate problems*
(with N. Igbida)
NoDEA Nonlinear Differential Equations Appl. 10 (2003), 287–307.