

Curriculum vitae

Cristian BEREANU

University of Bucharest

Information about the degrees and diplomas

- Mai 2013
 - *Habilitation*, “Simion Stoilow” Institute of Mathematics of the Romanian Academy.
 - Title of the thesis: *Boundary value problems with ϕ -Laplacians*.
 - Jury: C. Lefter (president of the jury), G. Moroşanu, A. Petruşel.
- December 2006
 - *PhD*, Université catholique de Louvain, Belgium.
 - Title of the thesis: *Topological degree methods for some nonlinear problems*.
 - Jury: J. Mawhin (coordinator), P. Habets (president of the jury), M. Willem, C. Fabry, G. Dincă, F. Zanolin.
- February 2002
 - *MSc*, University of Bucharest, coordinator G. Dincă.
 - Title of the thesis: *Metode topologice și variaționale în studiul unor clase de ecuații neliniare*.
- June 2000
 - *BSc*, University of Bucharest, coordinator R. Cristescu.
 - Title of the thesis: *Reprezentări integrale ale unor operatori liniari*.

Information about the professional experience and jobs

- September 2002 - September 2008: *Assistant*, Department of Mathematics, Université catholique de Louvain, Belgium.
- October 2008 - March 2014: *Researcher (C.S.)*, “Simion Stoilow” Institute of Mathematics of the Romanian Academy.
- March 2014 - present: *Senior Researcher III (C.S. III)*, “Simion Stoilow” Institute of Mathematics of the Romanian Academy.
- October 2013 - September 2014: *Full Professor*, University of Pitești.
- October 2014 - Ianuarie 2019: *Associate Professor*, University of Bucharest.
- Februarie 2019 - present: *Full Professor*, University of Bucharest.

Scientometric indicators

- Hirsch index: **19** (*Web of Science*), **20** (*Scopus*), **23** (*Google Scholar*)
- Total number of citations (without self-citations):
 - **745** (according to *Web of Science*), **761** (according to *Scopus*)
 - according to *MathSciNet* the project leader is cited **775 times by 297 different authors**

Profile addresses/IDs

- Scopus Author ID: **22957333400**
<https://www-scopus-com.am.e-nformation.ro/authid/detail.uri?authorId=22957333400>
- MR Author ID: **764068**
- Google Scholar: <https://scholar.google.com/citations?user=X42s5JAAAAAJ&hl=ro&oi=ao>
- ORCID ID: **0000-0003-2559-1946**
- Brainmap: the personal BrainMap ID is **U-1700-030K-7485** and the profile address from www.brainmap.ro is <https://www.brainmap.ro/cristian-bereanu>.

Co-authors (*sorted by no. of publications*)

- **J. Mawhin** (24), **P. Jebelean** (19), **P.J. Torres** (7), **C. Şerban** (5), **D. Gheorghe** (3), **M. Zamora** (3), **D. Arcoya** (2), **D. de la Fuente** (1), **A. Romero** (1), **H.B. Thompson** (1).

Publications

- **38 ISI articles:** *Adv. Differential Equations* (2006) ; *Adv. Nonlinear Stud.* (2019, 2014 and 2005) ; *Arch. Ration. Mech. Anal.* (2019) ; *Bound. Value Probl.* (2012) ; *Bull. Belg. Math. Soc. Simon Stevin* (2008) ; *Calc. Var. Partial Differential Equations* (2020 and 2013) ; *Commun. Contemp. Math.* (2017 and 2013) ; *Discrete Contin. Dyn. Syst. A* (2013 and 2010) ; *Electron. J. Qual. Theory Differ. Equ.* (2015) ; *J. Differential Equ.* (2007) ; *J. Difference Equ. Appl.* (2008 and 2006) ; *J. Dynam. Differential Equations* (2010) ; *J. Fixed Point Theory Appl.* (2008) ; *J. Funct. Anal.* (2013 – 2 articles and 2011 – 1 article) ; *J. Math. Anal. Appl.* (2013, 2009, 2008 and 2007) ; *NoDEA Nonlinear Differ. Equ. Appl.* (2013 and 2008) ; *Nonlinear Anal.* (2009 and 2008) ; *Math. Nachr.* (2010) ; *Proc. Amer. Math. Soc.* (2012 and 2009) ; *Proc. Roy. Soc. Edinburgh Sect. A* (2018 and 2008) ; *Rend. Lincei Mat. Appl.* (2011) ; *Topol. Methods Nonlinear Anal.* (2011 and 2006).
- **5 articles in Book Series** (*conference proceedings papers*) indexed in WoS/MathSciNet and **4 other articles indexed** in MathSciNet

Academic grants

- October 2011-October 2014: *Critical point theory and degree theory for relativistic Laplacians*, UEFISCDI - CNCS, **PN-II-RU-TE-2011-3-0157**, 170454 euros (750000 RON), [Link](#);
- September 2011-February 2012: **GENIL grant YTR-2011-7** (Spain), 12000 euros, [Link](#);
- June 2009-June 2011: *Topological and variational methods in the study of some discrete or continuous boundary value problems*, UEFISCDI - CNCS, **PN II/RP-3/2008**, 97727 euros (430000 RON), [Link](#);

Prizes

- The prize "*Gheorghe Țițeica*" of the Romanian Academy (2010).

Lectures held and/or research stages abroad/in Romania

- *Universidad de Granada* (Spain): April 18-30, 2023, February 1-23, 2018; March 1-31, 2017; February 11-25, 2015; November 18 - December 02, 2013; September 2011 - February 2012; November 22-30, 2010; March 26-30, 2007.
- *University of Trieste* (Italy): October 20 - November 02, 2013.
- *Université catholique de Louvain* (Belgium): November 18 - December 02, 2009.
- *West University of Timișoara* (Romania): October 25 - November 05, 2010 ; October 25 - November 07, 2009 ; March 27-30, 2008.

Invited talks at international conferences (a selection)

- *Italian-Romanian Colloquium on Differential Equations and Applications*, April 10-12, 2019, Università degli Studi di Udine, Italy ([Link](#)).
- *International Conference on Nonlinear Operators, Differential Equations and Applications - ICNODEA*, July 14-17, 2015 & July 5-8, 2011, Cluj-Napoca, Romania ([Link 2015](#) ; [Link 2011](#)).
- *Equadiff 13*, August 26-30, 2013, Prague, Czech Republic ([Link](#)).
- *The 9th AIMS Conference on Dynamical Systems Differential Equations and Applications*, July 01-05, 2012, Orlando, U.S.A ([Link](#)).
- *Workshop on Operator Theory and Operator Algebras 2012*, September 10-14, 2012, Lisbon, Portugal ([Link](#)).
- *Colloquium on Differential Equations and Integration Theory*, October 14-17, 2010, Krtiny, Czech Republic ([Link](#)).
- *10-eme Colloque Franco-Roumain*, August 26-31, 2010, Poitiers, France ([Link](#)).
- *Nonlinear Differential Equations, Leray-Schauder degree for some nonlinear problems with ϕ -Laplacian*, September 10, 2008, Bruxelles, Belgium ([Link](#)).

Lista publicatiilor

Cristian Bereanu

1. D. Arcoya, C. Bereanu, P.J. Torres, Lusternik-Schnirelman theory for the action integral of the Lorentz force equation, *Calculus of Variations and Partial Differential Equations*, 59 (2020), art. no. 50.
2. D. Arcoya, C. Bereanu, P.J. Torres, Critical point theory for the Lorentz force equation, *Arch. Rational Mech. Anal.*, 232 (2019), 1685-1724.
3. C. Bereanu, P.J. Torres, A variational approach for the Neumann problem in some FLRW spacetimes, *Advanced Nonlin. Studies*, 19 (2019), 413-423.
4. C. Bereanu, M. Zamora, Periodic solutions for indefinite singular perturbations of the relativistic acceleration, *Proc. Royal Soc. Edinburgh*, 148A (2018), 703-712.
5. C. Bereanu, D. de la Fuente, A. Romero, P.J. Torres, Existence and multiplicity of entire radial spacelike graphs with prescribed mean curvature function in certain Friedmann-Lemaitre-Robertson-Walker spacetimes, *Commun. Contemp. Math*, 19 (2017), 18 pp.
6. C. Bereanu, P. Jebelean, J. Mawhin, The Dirichlet problem with mean curvature operator in Minkowski space - a variational approach, *Advanced Nonlin. Studies*, 14 (2014), 315-326.
7. C. Bereanu, P. Jebelean, J. Mawhin, Multiple radial solutions at resonance for Neumann problems involving the mean extrinsic curvature operator, *Progress in Nonlinear Differential Equations and Their Applications*, 85 (2014), 87-101.
8. C. Bereanu, P. Jebelean, P.J. Torres, Positive radial solutions for Dirichlet problems with mean curvature operators in Minkowski space, *J. Functional Analysis*, 264 (2013), 270-287.
9. C. Bereanu, P. Jebelean, P.J. Torres, Multiple positive radial solutions for a Dirichlet problem involving the mean curvature operator in Minkowski space, *J. Functional Analysis*, 265 (2013), 644-659.

10. C. Bereanu, P. Jebelean, J. Mawhin, Radial solutions for Neumann problems involving mean extrinsic curvature and periodic nonlinearities, *Calc. Var. Partial Differential Equations*, 46 (2013), 113-122.
11. C. Bereanu, P. Jebelean, Multiple critical points for a class of periodic lower semicontinuous functionals, *Discrete Contin. Dyn. Syst.*, 33 (2013), 47-66.
12. C. Bereanu, D. Gheorghe, M. Zamora, Non-resonant boundary value problems with singular ϕ -Laplacian operators, *NoDEA Nonlinear Differ. Equ. Appl.*, 20 (2013), 1365-1377.
13. C. Bereanu, D. Gheorghe, M. Zamora, Periodic solutions for singular perturbations of the singular ϕ -Laplacian operator, *Commun. Contemp. Math.*, 15 (2013), 22 pp.
14. C. Bereanu, P. Jebelean, C. Serban, Periodic and Neumann problems for discrete $p(\cdot)$ -Laplacian, *J. Math. Anal. Appl.*, 399 (2013), 75-87.
15. C. Bereanu, P.J. Torres, Existence of at least two solutions of the forced relativistic pendulum, *Proc. Amer. Math. Soc.*, 140 (2012), 2713-2719.
16. C. Bereanu, P. Jebelean, C. Serban, Ground state and mountain pass solutions for discrete $p(\cdot)$ -Laplacian, *Bound. Value Probl.*, 2012:104, 13 pp.
17. C. Bereanu, P. Jebelean, C. Serban, Nontrivial solutions for a class of one-parameter problems with singular ϕ -Laplacian, *Ann. Univ. Buchar. Math. Ser.*, 3(LXI) (2012), 155-162.
18. C. Bereanu, P. Jebelean, J. Mawhin, Variational methods for nonlinear perturbations of singular ϕ -Laplacians, *Atti Acad. Naz. Lincei Cl. Sci. Fis. Mat. Natur. Rend. Lincei (9) Mat. Appl.*, 22 (2011), 89-111.
19. C. Bereanu, P. Jebelean, J. Mawhin, Multiple solutions for Neumann and periodic problems with singular ϕ -Laplacians, *J. Functional Analysis*, 261 (2011), 3226-3246.
20. C. Bereanu, D. Gheorghe, Topological methods for boundary value problems involving discrete vector ϕ -Laplacians, *Topol. Methods Nonlinear Anal.*, 38 (2011), 265-276.
21. C. Bereanu, P. Jebelean, J. Mawhin, Radial solutions for Neumann problems with ϕ -Laplacians and pendulum-like nonlinearities, *Discrete Contin. Dyn. Syst.*, 28 (2010), 637-648.
22. C. Bereanu, P. Jebelean, J. Mawhin, Radial solutions for Neumann problems involving mean curvature operators in Euclidean and Minkowski spaces, *Math. Nachr.*, 283 (2010), 379-391.

23. C. Bereanu, P. Jebelean, J. Mawhin, Periodic solutions of pendulum-like perturbations of singular and bounded ϕ -Laplacians, *J Dynam. Differential Equations*, 22 (2010), 463-471.
24. C. Bereanu, P. Jebelean, J. Mawhin, Radial solutions for some nonlinear problems involving mean curvature operators in Euclidean and Minkowski spaces, *Proc. Amer. Math. Soc.*, 137 (2009), 171-178.
25. C. Bereanu, J. Mawhin, Nonhomogeneous boundary value problems for some nonlinear equations with singular ϕ -Laplacian, *J. Math. Anal. Appl.*, 352 (2009), 218-233.
26. C. Bereanu, Periodic solutions of some fourth-order nonlinear differential equations, *Nonlinear Anal.*, 71 (2009), 53-57.
27. C. Bereanu, P. Jebelean, J. Mawhin, Nonhomogeneous boundary value problems for ordinary and partial differential equations involving singular ϕ -Laplacians, *Mat. Contemp.*, 36 (2009), 51-65.
28. C. Bereanu, P. Jebelean, J. Mawhin, Radial solutions for systems involving mean curvature operators in Euclidean and Minkowski spaces, 50-58, *AIP Conf. Proc.*, 1124, Amer. Inst. Phys., Melville, NY, 2009.
29. C. Bereanu, J. Mawhin, Multiple periodic solutions of ordinary differential equations with bounded nonlinearities and ϕ -Laplacian, *NoDEA Nonlinear Differ. Equ. Appl.*, 15 (2008), 159-168.
30. C. Bereanu, J. Mawhin, Boundary value problems for some nonlinear systems with singular ϕ -Laplacian, *J. Fixed Point Theory Appl.*, 4 (2008), 57-75.
31. C. Bereanu, An Ambrosetti-Prodi-type result for periodic solutions of the telegraph equation, *Proc. Roy. Soc. Edinburgh Sect. A.*, 138 (2008), 719-724.
32. C. Bereanu, J. Mawhin, Periodic solutions of nonlinear perturbations of ϕ -Laplacians with possible bounded ϕ , *Nonlinear Anal.*, 68 (2008), 1668-1681.
33. C. Bereanu, Periodic solutions of the nonlinear telegraph equations with bounded nonlinearities, *J. Math. Anal. Appl.*, 343 (2008), 758-762.
34. C. Bereanu, Multiple periodic solutions of some Lienard equations with p -Laplacian, *Bull. Belg. Math. Soc. Simon Stevin*, 15 (2008), 277-285.
35. C. Bereanu, J. Mawhin, Boundary value problems for second order nonlinear difference equations with discrete and singular ϕ -Laplacian, *J. Difference Equ. Appl.*, 14 (2008), 1099-1118.
36. C. Bereanu, J. Mawhin, Existence and multiplicity results for some nonlinear problems with singular ϕ -Laplacian, *J. Differential Equations*, 243

(2007), 536-557.

37. C. Bereanu, H.B. Thompson, Periodic solutions of second order nonlinear difference equations with discrete ϕ -Laplacian, *J. Math. Anal. Appl.*, 330 (2007), 1002-1015.

38. C. Bereanu, J. Mawhin, Periodic solution of first order nonlinear difference equations, *Rend. Semin. Mat. Univ. Politec. Torino*, 65 (2007), 17-33.

39. C. Bereanu, J. Mawhin, Boundary value problems with non-surjective ϕ -Laplacian and one-sided bounded nonlinearity, *Adv. Differential Equations*, 11 (2006), 35-60.

40. C. Bereanu, On a multiplicity result of J.R. Ward for superlinear planar systems, *Topol. Methods Nonlinear Anal.*, 27 (2006), 289-298.

41. C. Bereanu, J. Mawhin, Existence and multiplicity results for nonlinear difference equations with Dirichlet boundary conditions, *Math. Bohem.*, 131 (2006), 145-160.

42. C. Bereanu, J. Mawhin, Existence and multiplicity results for periodic solutions of nonlinear difference equations, *J. Difference Equ. Appl.*, 12 (2006), 677-695.

43. C. Bereanu, J. Mawhin, Upper and lower solutions for periodic problems: first order difference vs first order differential equations, 30-36, *AIP Conf. Proc.*, 835, Amer. Inst. Phys., Melville, NY, 2006.

44. C. Bereanu, Periodic solutions for delay competitions systems and delay prey-predator systems, *Adv. Nonlinear Stud.*, 5 (2005), 393-410.

45. C. Bereanu, J. Mawhin, Nonlinear Neumann boundary value problems with ϕ -Laplacian operators, *An. Stiint. Univ. Ovidius Constanta Ser. Mat.*, 12 (2004), 73-82.