

Cristodor Ionescu

Curriculum Vitae

Personal datas

Birthdate: 13.11.1953

Birthplace: Bucharest-Romania

Civil status: Married, 1 child.

Education

1972 - 1976 University of Bucharest, Faculty of Mathematics

1976 - 1977 University of Bucharest, Faculty of Mathematics, Master of Science in Mathematics, Specialization Algebra and Geometry

1991 Ph. D. in Mathematics - University of Bucharest, Supervisor Prof. Dr. N. Radu

Professional activity

1977 - 1983 Institute for electrical engineering Bucarest

1983 - 1990 Institute of Mathematics of the University of Bucarest - Researcher

1997 - 2005 Ovidius University Constantza - Professor.

2006 - 2015 Abdus Salam School of Mathematical Sciences Lahore, Pakistan - Foreign Professor.

1990 - present Institute of Mathematics of the Romanian Academy - Senior Researcher and Honorary Member (2023).

April 2016 - February 2023 - Scientific Secretary of the Institute of Mathematics of the Romanian Academy.

Research stages abroad

Visiting Professor - Consiglio Nazionale delle Ricerche(CNR - Italy) 1991, 1993, 1994, 1995, 1997.

Visiting Professor - Istituto Nazionale di Alta Matematica(INDAM - Italy) 1999, 2001, 2004, 2005, 2012.

Visiting Professor - Institut Teknologi Bandung (Indonesia) 2016.

Heinrich Hertz Fellowship - Univ. Cologne(Germany) - January 1991-July 1992.

DAAD - NATO Fellowship - Univ. Cologne(Germany) - October - November 1996.

Invited lectures

Universities of Bologna, Catania, Messina, Reggio Calabria, Trieste (Italy), Copenhagen (Denmark), Cologne (Germany), Istituto Superior Tecnico Lisbon (Portugal), Alfred Renyi Institute of Mathematics Budapest (Hungary), Hanoi Institute of Mathematics (Vietnam), Accademia Peloritana di Messina (Italy),

Institut Teknologi Bandung (Indonesia), Univ. of Yogyakarta (Indonesia), Abdus Salam School of Mathematical Sciences (Lahore) etc.

International meetings

Barcelona (1996), Beijing (2002), Berlin (1998), Bucarest (1989), Constantza (1996), Eisenach(1991), Erice(2001), Essen(1996), Nagoya(1990), Messina(1999), Sinaia (2002- invited speaker), Piraino (2003-invited speaker), DaLat-Vietnam (2003 - invited speaker), Kyoto (1990), Lisbon (2003), Piraino (2004 - invited speaker), Sevilla (2003), Suzhou (2002), Utrecht (1994), Tokyo (1990), Zürich (1994), Lahore (2006, 2007, 2008), Brolo (2007-invited speaker), Palembang (2008 - invited speaker), Villafranca Tirrena (2009 - invited speaker), Lausanne (2011- invited speaker), Bandung (2011- invited speaker), Messina (2011 - invited lecturer), Messina (2012 - invited lecturer), Messina (2017- invited speaker) etc.

Teaching activity

Courses at the University of Bucarest, Ovidius University Constanța, Ecole Normale Supérieure de Bucarest, Abdus Salam School of Mathematical sciences-Lahore and at the University of Messina (Italy).

As basic courses I had:

Algebra I at the Ovidius University Constantza and at the Abdus Salam School of Mathematical Sciences- Lahore.

Algebra II at the University of Bucarest and the Ovidius University Constantza.

Galois Theory at the University of Bucarest and the Ovidius University Constantza;

Group Theory at the Ovidius University Constantza.

As special or optional high-level courses:

Combinatorics in Algebra(Master Course) at the Ecole Normale Supérieure Bucarest, 2004.

Combinatorics and Computational Algebra(Ph. D. course) at the University of Messina(Italy), 2004.

Special Classes of Rings and Modules(Master Course) at the Ovidius University Constantza, 1997-1999 and the University of Bucharest, 2005-2006.

Finite Fields and Coding Theory(Master Course) at the Ovidius University Constantza, 2000-2001.

Quadratic Forms(Master Course) at the Ovidius University Constantza, 2000.

Commutative Algebra(Optional course) at the University of Bucharest, 1993-1998 and at the School of Mathematical Sciences, Lahore(2006, 2007, 2008, 2010, 2012).

Homological Algebra(Optional course) at the Ovidius University Constantza, 2002 - 2004.

Algebraic Geometry at the Ovidius University Constantza, 2000.

Homological Methods in Commutative Algebra (Master Course) at the École Normale Supérieure de Bucarest, 2004, 2017.

Homological Algebra at the École Normale Supérieure de Bucarest, 2005, 2009, 2012.

Combinatorics in Algebra - Univ of Messina, 2008.

Other

Member of the Romanian Mathematical Society.

Member of the American Mathematical Society.

Corresponding member of Accademia Peloritana dei Pericolanti di Messina.

Referee for Rev. Roumaine Math. Pures Appl., Math. Reports, An. St. Univ. Ovidius, Rocky Mt. J. Math., Fund. Math., Atti Accad. Peloritana Messina, An. Științ. Univ. Al. I. Cuza Iași (S.N.) Mat., Central Eur. J. Math., Bull. Math. Soc. Sci. Math. Roumanie, Proc. Amer. Math. Soc., Algebra and Number Theory, Atti Accad. Peloritana Messina, J. Algebra Appl., Arch. Math., Czech Math. J., J. Commut. Algebra etc.

Reviewer at Zentralblatt für Mathematik and Mathematical Reviews.

Director of several research grants of the Romanian Ministry of Education (1997, 1998, 2000, 2006) and of the Romanian Academy (1998, 1999, 2001).

Member of the Organizing or Scientific Committee of several national or international meetings(National School in Algebra (1999, 2001, 2004, 2005, 2006, 2007, 2008, 2018, 2019, 2023), Workshop on Cohen-Macaulay rings and related structures(Constantza 2005), Combinatorial and Homological aspects of Commutative Algebra (Busteni 2007), Workshop on Commutative Algebra and Algebraic Geometry with applications to different fields (Brolo 2007).

Publications

Books

1. C. Ionescu - *Algebraic equations* - Ovidius Univ. Press, Constanța, 2005.
2. C. Ionescu - *Classes of good noetherian rings* - Frontiers in Mathematics, Birkhäuser/Springer Nature, 2023.

Papers

1. A. Brezuleanu, C. Ionescu - *On the localization theorems and the completion of \mathbf{P} -rings* - Rev. Roumaine Math. Pures Appl., XXIX(1984), 371-380.
2. C. Ionescu - *Three-dimensional local rings whose formal fibers are geometrically normal but not geometrically regular* - Rev. Roumaine Math. Pures Appl., XXX(1985), 265-267.
3. C. Ionescu - *About R_n -morphisms* - An. Șt. Univ. Al. I. Cuza Iași Mat., 31(supl.)(1985), 28-29.
4. C. Ionescu - *Sur les anneaux aux fibres formelles géométriquement régulières en codimension n* - Rev. Roumaine Math. Pures Appl., XXXI(1986), 599-603.
5. C. Ionescu - *Homological codimension* - Seminar in Algebra, Cohen-Macaulay rings and modules, Univ. Iași, 1986, 2.1-2.7.
6. A. Brezuleanu, C. Ionescu - *The Cohen-Macaulay locus of a noetherian ring* - Seminar in Algebra, Cohen- Macaulay rings and modules, Univ. Iași, 1986, 10.1-10.8.
7. A. Brezuleanu, C. Ionescu - *Good Noetherian rings* - Proc. Nat. Conf. Algebra, Timișoara, 1986, 1-4.
8. C. Ionescu - *On \mathbf{P} -morphisms and openness of loci* - Stud. Cerc. Mat., 39(1987), 116-124.
9. C. Ionescu - *Finiteness of the integral closure of a noetherian ring* - Rend. Sem. Matem. Univers. Politecn. Torino, 47(1989), 153-162.
10. C. Ionescu - *Lifting theorems for japanese rings* - Commut. Alg. Combinatorics, Nagoya, 1990.

11. C. Ionescu - *Some remarks on japanese rings* - An. Univ. Bucureşti, 60(1991), 55-58.
12. C. Ionescu - *Reduced morphisms and Nagata rings* - Arch. Math., 60(1993), 334-338.
13. C. Ionescu - *Hochschild homology of a topological algebra and formal smoothness* - Comm. Algebra, 22(1994), 4801-4805.
14. C. Ionescu, G. Restuccia - *Remarks on normal morphisms* - Rend. Sem. Mat. Messina, Serie II, 4(1996/97), 77-81.
15. C. Ionescu, G. Restuccia - *q -torsion freeness of symmetric powers* - Rend. Circ. Mat. Palermo, 46(1997), 329-346.
16. C. Ionescu - *Theorems of Green, Macaulay and Gotzmann* - Combinatorics in Algebra and Geometry, Eforie - Nord, Constanța, 15-21 September 1998, 15-21.
17. M. Crupi, C. Ionescu - *A note on derivations in rings of positive characteristic* - Rev. Roumaine Math. Pures Appl., XLV(2000), 931-937.
18. C. Ionescu - *F-rational rings and flat morphisms* - Tight closure and applications, Eforie - Nord, Constanța, 15-20 september 2000.
19. C. Ionescu, G. Restuccia - *A note on P -morphisms* - Math. Reports, 3(2001), 169-175.
20. C. Ionescu - *Hochschild (co)-homology in commutative algebra. A survey* - An. Științ. Univ. "Ovidius" Ser. Math., 9(2001), 87-96.
21. C. Ionescu - *Torsion in tensor powers and flatness* - Commutative Algebra, Singularities and Computer Algebra, J. Herzog, V. Vuletescu(eds.), Proc. NATO Adv. Res. Workshop, Sinaia 2002, NATO Science Series II - Mathematics, Physics and Chemistry, 115(2003), 191-196.
22. C. Ionescu, G. Restuccia, R. Utano - *Fitting conditions for symmetric algebras of modules of finite projective dimension*, Boll. U.M.I., 10(2007), 681-696.
23. C. Ionescu - *Cohen-Macaulay fibres of a morphism*, Atti Accad. Peloritana Pericolanti, LXXXVI(2008), 1-9.
24. C. Ionescu, G. Rinaldo - *Some algebraic invariants of mixed product ideals*, Arch. Math., 91(2008), 20-30.
25. T. Dumitrescu, C. Ionescu - *Some applications of André-Quillen homology to classes of arithmetic rings*, Comm. Algebra, 36(2008), 299-308.
26. C. Ionescu - *A note on smoothness and differential bases in positive characteristic*, Bull. Math. Soc. Sci. Math. Roumanie, 52(2009), 421-426.
27. C. Ionescu - *Smoothness and differentials in positive characteristic*, Rend. Circ. Mat. Palermo, 58(2009), 45-50.

28. C. Ionescu - *On the vanishing of the first André-Quillen homology module*, Algebra Colloq., 16(2009), 593-602.
29. T. Dumitrescu, C. Ionescu - *Regularity and finite injective dimension in characteristic $p > 0$* , Studia Sci. Math. Hungar., 47(2010), 108-112.
30. T. Dumitrescu, C. Ionescu - *Some examples of two-dimensional regular rings*, Bull. Math. Soc. Sci. Math. Roumanie, 57(2014), 271-277.
31. C. Ionescu - *More properties of almost Cohen-Macaulay rings*, J. Commut. Algebra, 7(2015), 363-372.
32. C. Ionescu - *Flat local ring morphisms with prescribed depth and dimension*, An. Ştiinț. Univ. “Ovidius” Ser. Math., XXIV(2016), 217-220.
33. C. Ionescu, S. Tabejamaat - *Tensor products and direct limits of almost Cohen-Macaulay modules*, J. Algebra Appl., 17(2018), 1850221.
34. C. Ionescu - *Finite generation of André-Quillen (co-)homology of F -finite algebras*, Comm. Algebra, 49(2021), 1548-1552.
35. T. Dumitrescu, C. Ionescu - *A locally F -finite Noetherian domain that is not F -finite*, J. Commut. Algebra 14(2022), 177-180.
36. C. Ionescu - *About the Cohen-Macaulay defect and almost Cohen-Macaulay rings*, J. Algebra Appl., to appear.