

CURRICULUM VITAE

PERSONAL DATA

Name: SorinDăscălescu

Date and Place of Birth: April 23, 1964, Ploiești, Romania.

Address: University of Bucharest, Facultatea de Matematică și Informatică , Str. Academiei 14, Bucharest 1, RO-70109, Romania.

E-mail address: sdascal@fmi.unibuc.ro

Current Institutional Affiliation: University of Bucharest.

Education: B.Sc. at University of Bucharest, 1987; M. Sc. University of Bucharest, 1988; Ph.D. at University of Bucharest, in December 1992; Title of the Ph.D. thesis: "Graded Rings of Finite Support", supervisor: Professor Constantin Năstăsescu.

Marital Status: Married with two children.

EMPLOYMENT HISTORY

- September 1988- September 1990, High School Teacher at the "Colorom College", Codlea.
- Assistant Professor (October 1990- September 1995), Lecturer (October 1995- January 1999), Associate Professor (February 1999-September 2001), Professor (since October 2001) at the Faculty of Mathematics and Computer Science, University of Bucharest.
- September 1996-May 1997, Postdoctoral Fellow, Dalhousie University, Halifax, Canada.
- Associated Professor (September 2001- June 2006) at Kuwait University.

TEACHING EXPERIENCE

Undergraduate level: General Algebra, Linear Algebra, Calculus, Finite Mathematics.

Graduate Level: Ring Theory, Graded Rings, Clifford Theory, Hopf Algebras, Lie Algebras, Algebras and Coalgebras, Representation Theory, Quantum Groups.

PhD STUDENTS: I have coordinated 4 PhD students who defended their thesis: Mădălina Bărașcu, Sorina Preduț, Laura Năstăsescu and Filoteia Beșleagă.

RESEARCH INTEREST: My main scientific interest is in Hopf Algebras, Quantum Groups, Ring Theory and Graded Ring Theory. I have been author or coauthor of 87 papers published in general journals *Inventiones Mathematicae*, *Journal of the London Math. Soc.*, *Israel Journal of Mathematics*, *Mathematische Zeitschrift*, *Trans. Amer. Math. Soc.*, *Manuscripta Math.*, *Pacific J. Math.*, *Proceedings of the American Math. Soc.*, *Forum Mathematicum*, *Math. Scandinavica* etc, and also in specialized journals *Journal of Algebra* (16 papers), *Journal of Pure and Applied Algebra* (3 papers), *Communications in Algebra* (19 papers), *Algebras and Representation Theory* (2 papers), *J. Noncommutative Geometry*, *Linear Alg. Appl.*, *Linear and Multilinear Algebra* (4 papers), etc. I am also coauthor of a monograph on Hopf Algebras. My papers and the monograph have 866 citations according to MathSciNet. There are 534 citations (without self citations) on Web of Science. Among the journals where my papers have been cited I mention *Annals of Mathematics*, *Trans. Amer. Math. Soc.*, *J. European Math. Soc.*, *J. Reine Angew. Math.*, *Advances in Mathematics*, *Proc. London Math. Soc.*, *Ann. Sci. Ecole Norm. Sup.*, *Ann. Sc. Norm. Super. Pisa*, *Int. Math. Res. Not.*

SCIENTIFIC VISITS

Visiting Professor: Stellenbosch (South Africa), October-December 1993; Hobart (Australia), November 1995; Brussels, September-December 1997; Cordoba (Argentina), February 1999; Sackville (Canada), June 1999; Cordoba (Argentina), May 2000; Ferrara, October 2000.

Other scientific visits: Cortona, Bressanone 1990; Murcia 1991; Antwerp 1992, 1994, 1996, 1997, 1998, 1999; Brussels 1992, 1994, 1999, 2005; Sackville 1992, 1996, 2001; Leeds 1992, 1993; Halifax 2001, 2002; Almeria 1999, 2000; Granada 2000; Hasselt 2000.

PRIZES: "Gheorghe Lazăr" Prize of the Romanian Academy, 1996.

OTHER ACTIVITIES:

- Member of the Editorial Board of "Bulletin Mathematique de la Societe des Sciences Mathematiques de Roumanie", "Proceedings of the Romanian Academy-Series A", "Mathematical Reports" and "Revue Roumaine Math. Pures Appl."
- Director of the research grants IDEI-PCE: ID-1904 (2008-2011) and ID-0635 (2012-2016).
- Member of the American Mathematical Society.
- Reviewer for Mathematical Reviews and Zentralblatt Math.
- Director of the Doctoral School of Mathematics at University of Bucharest, 2011-2016.

PUBLICATIONS

BOOKS

1. S. Dăscălescu, C. Năstăsescu, Ş. Raianu, "Hopf Algebras: an introduction", Monographs in Pure and Applied Mathematics, **235** (2000), Marcel Dekker, New-York.
2. S. Dăscălescu, C. Năstăsescu, Ş. Raianu, Algebre Hopf, Editura Universităţii Bucureşti, 1998.
3. C. Băeţica, S. Dăscălescu, Probleme de algebră, Editura Universităţii Bucureşti, 1993.
4. C. Băeţica, C. Boboc, S. Dăscălescu şi G. Mincu, "Probleme de algebră", Editura Universităţii Bucureşti, 2008.

PAPERS

1. F. Beşleagă, S. Dăscălescu, Structural matrix algebras, generalized flags and gradings, to appear in Trans. Amer. Math. Soc.
2. S. Dăscălescu, C. Năstăsescu, L. Năstăsescu, Hopf algebra actions and transfer of Frobenius and symmetric properties, Math. Scandinavica **126** (2020), 32-40.
3. F. Beşleagă, S. Dăscălescu, L. Van Wyk, Classifying good gradings on structural matrix algebras, Linear and Multilinear Algebra **67** (2019), 1948-1957.
4. S. Dăscălescu, C. Năstăsescu, L. Năstăsescu, Graded semisimple algebras are symmetric, J. Algebra **491** (2017), 207-218.
5. S. Dăscălescu, G. Pavel, On the minimal number of generators of subalgebras of (co)invariants, Comm. Algebra **45** (2017), 4686-4690.
6. S. Dăscălescu, C. Năstăsescu, L. Năstăsescu, Symmetric algebras in categories of corepresentations and smash products, J. Algebra **465** (2016), 62-80.
7. C. Boboc, S. Dăscălescu, L. Van Wyk, Jordan isomorphisms of 2-torsionfree triangular rings, Linear and Multilinear Algebra **64** (2016), 290-296.
8. S. Dăscălescu, C. Năstăsescu, L. Năstăsescu, Group gradings on polynomial algebras, Comm. Algebra **44** (2016), 3340-3348.
9. S. Dăscălescu, M. Iovanov, Semiperfect and coreflexive coalgebras, Forum Math. **27** (2015), 2587-2607.
10. S. Dăscălescu, C. Năstăsescu, L. Năstăsescu, Frobenius algebras of corepresentations and group-graded vector spaces, J. Algebra **406** (2014), 226-250.
11. S. Dăscălescu, M. Iovanov, C. Năstăsescu, Path subcoalgebras, finiteness properties and quantum groups, Journal of Noncommutative Geometry **7** (2013), 737-766.
12. S. Dăscălescu, M. Iovanov, S. Preduţ, Frobenius structural matrix algebras, Linear Alg. Appl. **439** (2013), 3166-3172.

13. M. Băraşcu, S. Dăscălescu, Good gradings on upper block triangular matrix algebras, *Comm. Algebra* **41** (2013), 4290-4298.
14. S. Dăscălescu, M. Iovanov, C. Năstăsescu, Quiver algebras, path coalgebras and coreflexivity, *Pacific J. Math.* **262** (2013), 49-79.
15. S. Dăscălescu, S. Preduţ, L. Van Wyk, Jordan isomorphisms of generalized structural matrix rings, *Linear and Multilinear Algebra* **61** (2013), 369-376.
16. S. Dăscălescu, C. Năstăsescu şi B. Toader, Doi-Hopf modules associated to comodule coalgebras, *Comm. Algebra* **41** (2013), 1854-1864.
17. C. Boboc, S. Dăscălescu, L. Van Wyk, Isomorphisms between Morita context rings, *Linear and Multilinear Algebra* **60** (2012), 545-563.
18. S. Dăscălescu, C. Năstăsescu, A. Tudorache, A note on regular objects in Grothendieck categories, *Arabian Journal for Science and Engineering* **36** (2011), 957-962.
19. S. Dăscălescu, C. Năstăsescu şi B. Toader, On the dimension of the space of integrals on coalgebras, *Journal of Algebra* **324** (2010), 1625-1635.
20. S. Dăscălescu, C. Năstăsescu, G. Velicu, Balanced bilinear forms and finiteness properties for incidence coalgebras over a field, *Rev. Union Mat. Argentina* **51** (2010), 13-20.
21. S. Dăscălescu, C. Năstăsescu, Coactions on spaces of morphisms, *Algebras and representation theory* **12** (2009), 193-198.
22. S. Dăscălescu, C. Năstăsescu, M. Năstăsescu, Strongly involutory functors, *Comm. Algebra* **37** (2009), 1677-1689.
23. S. Dăscălescu, Group gradings on diagonal algebras, *Arch. Math.* **91** (2008), 212-217.
24. S. Dăscălescu, On the dimension of the space of integrals for finite dimensional bialgebras, *Studia Scientiarum Mathematicarum Hungarica* **45** (2008), 411-417.
25. C. Boboc, S. Dăscălescu, Group gradings on $M_3(k)$, *Comm. Algebra* **35** (2007), 2654-2670.
26. S. Dăscălescu, C. Năstăsescu, A Tudorache, L. Dăuş, Relative regular objects in categories, *Applied Categorical Structures* **14** (2006), 567-577.
27. C. Boboc, S. Dăscălescu, Good gradings on matrix algebras by finite abelian groups of prime index, *Bull. Math. Soc. Sc. Math. Roumanie* **49** (2006), 5-11.
28. N. Andruskiewitsch, S. Dăscălescu, On quantum groups at -1 , *Algebras and Representation Theory* **8** (2005), 11-34.
29. N. Chifan, S. Dăscălescu, C. Năstăsescu, Wide Morita contexts, relative injectivity and equivalence results, *Journal of Algebra* **284** (2005), 705-736.
30. F. Castano Iglesias, S. Dăscălescu, C. Năstăsescu, Symmetric coalgebras, *Journal of Algebra* **279** (2004), 326-344.
31. R. Khazal, S. Dăscălescu, Periodic rings with finitely generated underlying group, *International Journal of Mathematics and Math. Sciences* **36** (2004), 1887-1892.

32. S. Dăscălescu, Symmetric liftings of quantum linear spaces, *Mathematica* **46** (69) (2004), 141-147.
33. S. Dăscălescu, P. D. Jarvis, A. Kelarev, C. Năstăsescu, On associative superalgebras of matrices, *Rocky Mountain J. Math.* **34** (2004), 585-598.
34. S. Dăscălescu, Some examples of integrals for bialgebras, Hopf algebras, 133–141, *Lecture Notes in Pure Appl. Math.* **237** (2004), Marcel Dekker.
35. N. Andruskiewitsch, S. Dăscălescu, Co-Frobenius Hopf algebras and the coradical filtration, *Mathematische Zeitschrift* **243** (2003), 145-154.
36. R. Khazal, C. Boboc and S. Dăscălescu, Group gradings on $M_2(k)$, *Bull. Australian Math. Soc.* **68** (2003), 285-293.
37. R. Khazal, S. Dăscălescu, L. Van Wyk, Isomorphism of generalized triangular matrix rings and recovery of tiles, *International Journal of Mathematics and Math. Sciences* **9** (2003), 533-538.
38. C. Călinescu, S. Dăscălescu, A. Masuoka, C. Menini, Quantum lines over non-cocommutative Hopf algebras, *J. Algebra* **273** (2004), 753-779.
39. M. Beattie, S. Dăscălescu, Hopf algebras of dimension 14, *Journal of the London Math. Soc.* **69** (2004), 65-78.
40. M. Beattie, S. Dăscălescu, Ș. Raianu, Lifting of Nichols algebras of type B_2 , *Israel J. Math.* **132** (2002), 1-28.
41. S. Caenepeel, S. Dăscălescu, C. Năstăsescu, On gradings of matrix algebras and descent theory, *Comm. Algebra* **30** (2002), 5901-5920.
42. S. Dăscălescu, C. Năstăsescu, B. Torrecillas, Involution Hopf algebras with non-zero integral, *Bull. London Math. Soc.* **34** (2002), 33-36.
43. S. Dăscălescu, C. Năstăsescu, B. Torrecillas, Homological dimension of coalgebras and crossed coproducts, *K-Theory* **23** (2001), 53-65.
44. S. Dăscălescu, A. V. Kelarev, L. Van Wyk, Semigroup gradings of full matrix rings, *Comm. Algebra* **29** (2001), 5023-5031.
45. M. Beattie, S. Dăscălescu, L. Grünenfelder, Constructing pointed Hopf algebras by Ore extensions, *J. Algebra* **225**(2000), 743-770.
46. S. Dăscălescu, L. Van Wyk, The recovery of the non-diagonal tile in a tiled triangular matrix ring, *Indian J. Math.* **42** (2000), no. 2, 167–173
47. M. Beattie, S. Dăscălescu, Ș. Raianu, A co-Frobenius Hopf algebra with a separable Galois extension is finite, *Proc. Amer. Math. Soc.* **128**(2000), 3201-3203.
48. C. Boboc, S. Dăscălescu, On gradings of matrix algebras by cyclic groups, *Comm. Algebra* **29** (2001), 5013-5021.
49. S. Caenepeel, S. Dăscălescu, Ș. Raianu, Classifying pointed Hopf algebras of dimension 16, *Comm. Algebra* **28**(2000), 541-568.

50. M. Beattie, S. Dăscălescu, L. Grünenfelder, On pointed Hopf algebras of dimension p^n , Proc. Amer. Math. Soc. **128**(2000), 361-367.
51. S. Dăscălescu, A. V. Kelarev, C. Năstăsescu, Semigroup gradings of upper triangular matrix rings, Rev. Roumaine Math. Pures Appl. **46** (2001), 611-615.
52. M. Beattie, S. Dăscălescu, L. Grünenfelder, On the number of types of finite dimensional Hopf algebras, Inventiones Math. **136** (1999), 1-7.
53. S. Dăscălescu, C. Năstăsescu, B. Torrecillas, Co-Frobenius Hopf algebras: integrals, Doi-Koppinen modules and injective objects, J. Algebra **220** (1999), 542-560.
54. S. Caenepeel, S. Dăscălescu, L. Le Bruyn, Forms of Hopf algebras, Manuscripta Math. **100** (1999), 35-53.
55. S. Dăscălescu, B. Ion, C. Năstăsescu, J. Rios, Group gradings on full matrix rings, J. Algebra **220** (1999), 709-728.
56. S. Caenepeel, S. Dăscălescu, On pointed Hopf algebras of dimension 2^n , Bull. London Math. Soc. **31**(1999), 17-24.
57. S. Dăscălescu, F. Nichita, Yang-Baxter operators arising from (co)algebra structures, Comm. Algebra **27**(1999), 5833-5845.
58. S. Dăscălescu, Pointed Hopf algebras with large coradical, Comm. Algebra **27**(1999), 4821-4826.
59. S. Dăscălescu, A. V. Kelarev, Finiteness conditions for semigroup-graded modules, Rev. Roumaine Math. Pures Appl. **44**(1999), 37-50.
60. S. Caenepeel, S. Dăscălescu, Pointed Hopf algebras of dimension p^3 , J. Algebra **209**(1998), 622-634.
61. M. Beattie, S. Dăscălescu, L. Grünenfelder, C. Năstăsescu, Finiteness Conditions, Co-Frobenius Hopf Algebras and Quantum Groups, J. Algebra **200**(1998), 312-333.
62. S. Dăscălescu, L. Van Wyk, Complete blocked triangular matrix rings over a noetherian ring, J. Pure Appl. Algebra **133** (1998), 65-68.
63. M. Beattie, S. Dăscălescu, Ş. Raianu, F. Van Oystaeyen, The categories of Yetter-Drinfel'd modules, Doi-Hopf modules and two-sided two-cosided Hopf modules, Applied Categorical Structures **6**(1998), 223-237.
64. S. Dăscălescu, Ş. Raianu, F. Van Oystaeyen, Smash (Co)-products from adjunctions, "Rings, Hopf algebras and Brauer Groups", Marcel Dekker Lecture Notes, **197**(1998), 103-110.
65. S. Dăscălescu, C. Năstăsescu, Ş. Raianu, Strongly graded coalgebras and graded crossed coproducts, 'Abelian groups, module theory, and topology', editors D. Dikranjan și L. Salce, Proceedings of the conference in honour of A. Orsatti, Padua, Italy, Marcel Dekker Lecture Notes **201**(1998), 131-142.
66. S. Dăscălescu, C. Năstăsescu, B. Torrecillas, F. Van Oystaeyen, Duality theorems for graded algebras and coalgebras, J. Algebra **192**(1997), 261-276.

67. M. Beattie, S. Dăscălescu, Ş. Raianu, Galois Extensions for Co-Frobenius Hopf Algebras, *J. Algebra* **198**(1997), 164-183.
68. D. Bulacu, S. Dăscălescu, L. Grünenfelder, Modules Graded By G -Sets. Duality And Finiteness Conditions, *J. Algebra* **195**(1997), 624-633.
69. S. Caenepeel, S. Dăscălescu, G. Militaru, F. Panaite, Coalgebra deformations of bialgebras by Harrison cocycles, copairings of Hopf algebras and double crosscoproducts, *Bull. Belgian Math. Soc.* **4**(1997), 647-672.
70. S. Dăscălescu, C. Năstăsescu, B. Torrecillas, F. Van Oystaeyen, Comodules graded by G -sets. Applications, *Comm. Algebra* **25**(1997), 159-175.
71. S. Dăscălescu, A. V. Kelarev, B. Torrecillas, FBN Hopf Module Algebras, *Comm. Algebra* **25**(1997), 3521-3529.
72. S. Dăscălescu, L. Van Wyk, Do isomorphic structural matrix rings have isomorphic graphs?, *Proc. Amer. Math. Soc.* **124** (1996), 1385–1391.
73. S. Dăscălescu, Ş. Raianu, F. Van Oystaeyen, Some remarks on a theorem of H.-J. Schneider, *Comm. Algebra* **24** (1996), 4477–4493.
74. S. Caenepeel, S. Dăscălescu, Ş. Raianu, Cosemisimple Hopf algebras coacting on coalgebras, *Comm. Algebra* **24** (1996), 1649–1677.
75. S. Dăscălescu, C. Năstăsescu, A. Del Rio, F. Van Oystaeyen, Gradings of finite support. Application to injective objects, *J. Pure Appl. Algebra* **107** (1996), 193–206.
76. M. Beattie, S. Dăscălescu, Categories of modules graded by G -sets. Applications, *J. Pure Appl. Algebra* **107** (1996), 129–139.
77. S. Dăscălescu, G. Militaru, Ş. Raianu, Crossed coproducts and cleft coextensions, *Comm. Algebra* **24** (1996), 1229–1243.
78. S. Dăscălescu, Ş. Raianu, Y. H. Zhang, Finite Hopf-Galois coextensions, crossed coproducts, and duality, *J. Algebra* **178** (1995), 400–413.
79. M. Beattie, S. Dăscălescu, C. Năstăsescu, A note on semilocal graded rings, *Rev. Roumaine Math. Pures Appl.* **40** (1995), 253–258.
80. S. Dăscălescu, C. Năstăsescu, Ş. Raianu, F. Van Oystaeyen, Graded coalgebras and Morita-Takeuchi contexts, *Tsukuba J. Math.* **19** (1995), 395–407.
81. S. Caenepeel, S. Dăscălescu, Ş. Raianu, A Maschke-type theorem for crossed coproducts, *An. Ştiinţ. Univ. Ovidius Constanţa Ser. Mat.* **2** (1994), 44–51.
82. S. Dăscălescu, L. Van Wyk A note on intermediate normalising extensions, *Bull. Austral. Math. Soc.* **50** (1994), 313–316.
83. S. Dăscălescu, A. del Rio, Graded T -rings with finite support, *Comm. Algebra* **21** (1993), 3619–3636.
84. S. Dăscălescu, A note on groups with the finite embedding property, *Proceedings of the International Conference on Group Theory (Timișoara, 1992)*, *An. Univ. Timișoara Ser. Ştiinţ. Mat.* 1993, 43–45.

85. S. Dăscălescu, Graded semiperfect rings, Bull. Math. Soc. Sci. Math. Roumaine 36(84) (1992), 247–254.
86. S. Dăscălescu, Some results on graded rings of finite support, Proceedings of the 9-th conference on Algebra, Cluj Napoca, Fac. Math. Comput. Sci. res. Semin. **1** (1992), 131-136.
87. S. Dăscălescu, C. Năstăsescu, The equation $x^n = a$ in left cancellative monoids, Riv. Mat. Pura Appl. Udine **9** (1991), 95–115.
88. S. Dăscălescu, C. Năstăsescu, Graded T -rings, Comm. Algebra **17** (1989), 3033–3042.