

## Curriculum vitae

**Name:** Jespers, Eric Florent Joseph Marie

**Date of birth:** 2 October 1955  
Herent, Belgium

**Academic training:** Doctor in Sciences (Mathematics) 1982  
Katholieke Universiteit Leuven (K.U. Leuven)

Licentiate in Mathematics 1978  
Katholieke Universiteit Leuven

Teaching degree for high school education 1978  
Katholieke Universiteit Leuven

**Present position:** Emeritus Gewoon Hoogleraar  
Vrije Universiteit Brussel  
Department of Mathematics and Data Sciences  
since February 2021

**PREVIOUS POSITIONS**

Gewoon Hoogleraar (Ordinary Professor) Dean	Department of Mathematics Vrije Universiteit Brussel Faculty of Sciences and Bio-Engineering Sciences	2002 (March)-2021 (Feb.) 2015-2019
Head Hoogleraar (Professor)	Department of Mathematics Vrije Universiteit Brussel Vrije Universiteit Brussel	2004 (March) -2008 (May) 1998-2002 (febr.)
Deputy chair	Department of Mathematics Memorial University of Newfoundland, St. John's, Canada	1997-1998
Research professor (tenure)	Memorial University of Newfoundland, St. John's, Canada	1996-1998
Full Professor (tenure)	Memorial University of Newfoundland, St. John's, Canada	1992-1998
Associate Professor (tenure)	Memorial University of Newfoundland, St. John's, Canada	1988-92
Assistant Professor	Memorial University of Newfoundland, St. John's, Canada	1987-88
Assistant	Industriële Hogeschool De Nayer - Mechelen, Belgium	Feb. 1987- Aug. 1987
Associate Professor (tenure)	University of Cape Town South Africa	1985-86
Lecturer (tenure)	University of Stellenbosch South Africa	1984-85
System specialist	Bell Telephone Mfg., Antwerp, Belgium	Aug. 1983 - April 84
Assistant	K.U. Leuven, Belgium	1978-83

## 1 RESEARCH RECORD

**Research Expertise:** algebra (group theory, semigroup theory, ring theory, representation theory, set-theoretic solutions of the Yang-Baxter equation, skew braces)

**Head of the research group Algebra** at Vrije Universiteit Brussel, 1998-2021

### 1.1 PUBLICATIONS

#### 1.1.1 Publications in scientific journals with refereeing

1. E. Jespers, F. Van Oystaeyen, K. Zeeuwts, Control subgroups and localization of group rings, *Comm. in Algebra*, 9 (12) (1981), 1263-1284.
2. E. Jespers, L. Le Bruyn, P. Wauters,  $\Omega$ -Krull rings I, *Comm. in Algebra*, 10 (1982), 1801-1818.
3. E. Jespers, J. Krempa, E.R. Puczyłowski, On radicals of graded rings, *Comm. in Algebra*, 10 (1982), 1849-1854.
4. E. Jespers, L. Le Bruyn, P. Wauters, A characterization of central  $\Omega$ -Krull rings, *Journal of Algebra*, 81 (1983), 165-179.
5. E. Jespers, On geometrical  $\Omega$ -Krull rings, *Comm. in Algebra*, 7 (11) (1983), 771-792.
6. E. Jespers,  $\Omega$ -Krull rings and skew semigroup rings, *Comm. in Algebra*, 12 (3) (1984), 345-376.
7. E. Jespers, P. Wauters, On central  $\Omega$ -Krull rings and their class groups, *Canad. J. Math.*, 36 (2) (1984), 206-239.
8. E. Jespers, P. Wauters, What is an  $\Omega$ -Krull ring?, *Journal of Pure and Applied Algebra*, 31 (1984), 63-73.
9. E. Jespers, P. Wauters, Marubayashi-Krull orders and strongly graded rings, *Journal of Algebra*, 8 (2) (1984), 511-521.
10. E. Jespers, E. R. Puczyłowski, The Jacobson radical of semigroup rings of commutative cancellative semigroups, *Comm. in Algebra*, 12 (9) (1984), 1115-1123.
11. E. Jespers, J. Krempa, P. Wauters, The Brown McCoy-radical of semigroup rings of commutative cancellative semigroups, *Glasgow J. Math.*, 26 (1985), 107-113.
12. E. Jespers, P. F. Smith, Integral group rings of torsion-free polycyclic-by-finite groups are maximal orders, *Comm. in Algebra*, 16(3) (1985), 669-680.

13. P. Wauters, E. Jespers, Asano-orders and graded rings, *Comm. in Algebra*, 13 (4) (1985), 811-833.
14. E. Jespers, On radicals of graded rings and applications to semigroup rings, *Comm. in Algebra*, 13 (11) (1985), 2457-2472.
15. E. Jespers, P. Wauters,  $\Omega$ -Krull Rings II, *Comm. in Algebra*, 14 (5) (1986), 833-849.
16. P. Wauters, E. Jespers, Examples of non-commutative Krull rings, *Comm. in Algebra*, 14 (5) (1986), 819-832.
17. E. Jespers, P. Wauters, Almost Krull Rings, *J. Austral. Math. Soc. (Series A)* (4) (1986), 275-285.
18. E. Jespers, On  $\Omega$ -Krull rings, *Questiones Mathematicae*, 9 (1986), 311-338.
19. E. Jespers, P. Wauters, When is the semigroup ring of a commutative semigroup local or semilocal? *J. of Algebra*, 108 (1) (1987), 188-194.
20. E. Jespers, The Jacobson radical of semigroup rings of commutative semigroups, *J. of Algebra*, 109 (1) (1987), 266-280.
21. E. Jespers, When is the Jacobson radical of a semigroup ring of a commutative semigroup homogeneous?, *J. of Algebra*, 109 (2) (1987), 549-560.
22. E. Jespers, P. Wauters, Rings graded by an inverse semigroup with finitely many idempotents, *Houston J. Math*, 15 (2) (1989), 291-304.
23. E. Jespers, P. Wauters, A general notion of noncommutative Krull rings, *J. of Algebra*, 112 (2) (1988), 388-415.
24. B. W. Green, E. Jespers, On the embedding of ideals in some one dimensional local rings, *Arch. der Math.*, 50 (1988), 125-127.
25. E. Jespers, Chain Conditions and Semigroup Graded Rings, *J. Austral. Math. Soc. (Series A)*, 45 (1988), 372-380.
26. E. Jespers, Jacobson rings and rings strongly graded by an abelian group, *Israel J. Math.*, 63 (1) (1988), 67-78.
27. E. Jespers, P. Wauters, Graded rings and Krull orders, *Proc. A.M.S.*, 107 (2) (1989), 309-313.
28. E. Jespers, Simple Abelian-group Graded Rings, *Boll. Unione Mat. Italiana*, (7) 3-A (1989), 103-106.
29. E. G. Goodaire, E. Jespers, M. M. Parmenter, Determining units in Some Integral Group Rings, *Can. Math. Bull.*, 33 (2) (1990), 242-246.

30. F. Decruyenaere, E. Jespers, P. Wauters, Semigroup Algebras and Direct Sums of Domains, *J. Algebra*, 138(2) (1991), 505-514.
31. E. Jespers, E. R. Puczyłowski, On Ideals of tensor products, *J. of Algebra*, 140 (1991), 124-130.
32. F. Decruyenaere, E. Jespers, Dedekind Domains and Graded Rings, *Proc. A.M.S.*, 110 (1) (1990), 21-26.
33. M. Ferrero, E. Jespers, E. R. Puczyłowski, Prime Ideals of Graded Rings and Related Matters, *Comm. in Algebra*, 18 (11) (1990), 3819-3834.
34. E. Jespers, E. R. Puczyłowski, The Jacobson and Brown-McCoy radicals of rings graded by free groups, *Comm. in Algebra*, 19(2) (1991), 551-558.
35. F. Decruyenaere, E. Jespers, P. Wauters, On Commutative Principal Ideal Semigroup Rings, *Semigroup Forum*, 43 (1991), 367-377.
36. M. Beattie, E. Jespers, On Perfect Graded Rings, *Comm. in Algebra* 19 (8) (1991), 2363-2371.
37. E. Jespers, Special Principal Ideal Rings and Absolute Subretracts, *Can. Math. Bull.*, (34) (3) (1991), 364-367.
38. E. Jespers, G. Leal, Describing units of integral group rings of some 2-groups, *Comm. in Algebra*, 19 (6) (1991), 1809-1827.
39. F. Decruyenaere, E. Jespers, Prüfer Domains and Graded Rings, *J. of Algebra*, 150 (2) (1991), 308-320.
40. F. Decruyenaere, E. Jespers, Graded Commutative Principal Ideal Rings, *Bul. Belg. Math. Soc. Ser. B* 43 (2) (1991), 143-150.
41. E. Jespers, Computing the extended Centroid of Abelian-Group Graded Rings, *Comm. in Algebra*, 20 (12) (1992), 3603-3608.
42. E. Jespers, M. Parmenter, Commutative Absolute Subretracts, *Journal of the Australian Math. Soc., Series A*, 54 (1993), 128-132.
43. E. Jespers, M.M. Parmenter, Bicyclic units in  $ZS_3$ , *Bull. Soc. Math. Belg., Ser. B*, 44 (2) (1992), 141-146.
44. E. Jespers, Graded rings and Asano orders, *Mathematica Japonica*, 38 (12) (1993), 1-4.
45. E. Jespers, G. Leal, C. P. Milies, Indecomposable R. A. loops and their loop algebras, *C.R. Math. Rep. Acad. Science, Roy. Soc. Canada*, Vol. 24 (5) (1992), 189-194.

46. E. Jespers, G. Leal, A Characterization of the Unit Loop of the Integral Loop Ring  $ZM_{16}(Q, 2)$ , *J. of Algebra*, 155(1)(1993), 95–109.
47. E. Jespers, M.M. Parmenter, Units of group rings of groups of order 16, *Glasgow Math. Journal*, 35(1993), 367–379.
48. E. Jespers, G. Leal, Generators of large subgroups of the unit group of integral group rings, *Manuscripta Mathematica*, 78(1993), 303–315.
49. E. Jespers, Simple Graded Rings, *Comm. Algebra*, 21(7)(1993), 2437–2444.
50. E. Jespers, G. Leal, M.M. Parmenter, Bicyclic and Bass cyclic units in group rings, *Canad. Math. Bull.* 36(2)(1993), 178–182.
51. E. Jespers, P. Wauters, Pairs of Rings with a Bijective Correspondence between the Prime Spectra, *Journal of the Australian Math. Soc. Series A.* 55 (1993), 238–245.
52. M. Clase, E. Jespers, Perfectness of Semigroup Graded Rings, *Bull. Soc. Math. Belg.* 45 (Fasc. 1-2) (1993), 94–102.
53. E. Jespers, G. Leal, C.P. Milies, Loop Algebras of Indecomposable R.A. Loops, *Comm. Algebra* 22(4) (1994), 1363–1379.
54. E. Jespers, Free normal complements and the unit group in integral group rings, *Proc. Amer. Math. Soc.*, 122 (1) (1994), 59–66.
55. A. Giambruno, E. Jespers, A. Valenti, Group Identities on Units of Rings, *Arch. Math.* 63 (1994), 291–296.
56. E. Jespers, The unit group of integral group rings: generators of subgroups of finite index, *Matemática Contemporânea* 6 (Part 1) (1994), 33–40.
57. E. Jespers, G. Leal, C.P. Milies, Units of integral groups rings of some metacyclic groups, *Canad. Math. Bull.* 37(2) (1994), 228–237.
58. M. Clase, E. Jespers, On the Jacobson radical of semigroup graded rings, *J. Algebra* 169 (1) (1994), 79–97.
59. E. Jespers, J. Okninski, Nilpotent semigroups and semigroup algebras, *J. Algebra* 169 (3) (1994), 984–1011.
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61. E. Jespers, Bicyclic units in some integral group rings, *Can. Math. Bull.*, 38(1) (1995), 80–86.
62. E. Jespers, G. Leal, Degree 1 and 2 representations of nilpotent groups and applications to units of group rings, *Manuscripta Mathematica* 86 (1995), 479–498.

63. E. Jespers, G. Leal, C.P. Milies, Classifying Indecomposable R.A. Loops, *J. Algebra* 176 (1995), 569-584. ISSN 0021-8693
64. E. Jespers, P. Wauters, *Principal ideal semigroup algebras*, *Comm. Algebra* 23 (13) (1995), 5057-5076.
65. M. Clase, E. Jespers, A. Kelarev, J. Okninski, Artinian semigroup-graded rings, *Bull. London Math. Soc.* 27 (1995), 441-446.
66. E. Jespers, J. Okninski, *Descending chain conditions and graded rings*, *J. Algebra* 178 (1995), 458-479. ISSN 0021-8693
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68. E. Jespers, G. Leal, A. Del Rio, Products of free groups in the unit group of integral group rings, *J. Algebra*, 180 (1996), 22-40. ISSN 0021-8693
69. E. Jespers, C.P. Milies, Units of Group rings, *J. Pure Appl. Algebra*, 107 (1996), 233-251.
70. E. Jespers, D. Wang, Units of integral semigroup rings, *J. Algebra* 181 (1996), 395-413.
71. E. Jespers, M.M. Parmenter, S.K. Sehgal, Central Units of Integral Group Rings of Nilpotent Groups, *Proc. Amer. Math. Soc* 124 (1996), no.4, 1007-1012.
72. E. Jespers, J. Okninski, Semigroup algebras that are principal ideal rings, *J. Algebra* 183 (1996), 837-863. ISSN 0021-8693
73. S. Coelho, E. Jespers, C.P. Milies, Automorphisms of Group Algebras of Some Metacyclic Groups, *Comm. in Algebra* 24 (13) (1996), 4135-4145.
74. E. Jespers, G. Leal, Free products of abelian groups in the unit group of integral group rings, *Proc. A.M.S.* 126 (5) (1998), 1257-1265.
75. E. Jespers, J. Okninski, Binomial semigroups, *J. of Algebra* 202 (1) (1998), 250-275.
76. A. Giambruno, E. Jespers, Central Idempotents and Units in Rational Group Algebras of Alternating Groups, *Int. J. Algebra and Computation* Vol.8, No.4 (1998), 467-477.
77. E. Jespers, J. Okniński, Semigroup algebras and maximal orders, *Canadian Math. Bulletin* vol. 42 (3) (1999), 298-306.
78. E. Jespers, J. Okninski, Noetherian semigroup algebras, *J. Algebra* 218(1999), 543-562. ISSN 0021-8693
79. E. Jespers, J. Okniński, On a class of Noetherian algebras, *roc. Roy. Soc. Edinburgh Sect. A* 129 (1999), no. 6, 1185-1196.

80. E. Jespers, S.O. Juriaans, Isomorphisms of integral group rings, *J. Algebra* 223 (2000), 171-189. ISSN 0021-8693
81. E. Jespers, A. del Rio, A structure theorem for the unit group of the integral group ring of some finite groups, *Journal für die Reine und Angewandte Mathematik* 521 (2000), 99-117.
82. E. Jespers, G. Leal, Congruence subgroups in group rings, *Comm. in Algebra* 28 (7) (2000), 3155-3168.
83. E. Jespers, Q. Wang, Hereditary semigroup algebras, *J. Algebra* 229 (2000), 532-546. Correction by the editor: Hereditary semigroup algebras (with Q. Wang), *J. Algebra* 233 (2000), no. 1, 409-424. ISSN 0021-8693
84. E. Jespers, J. Okniński, Submonoids of polycyclic-by-finite groups and their algebras, *J. Algebras and Representation Theory* 4(2) (2001), 133-155.
85. E. Jespers, A.V. Kelarev and J. Okninski, On the Jacobson radical of graded rings, *Comm. in Algebra* 29 (5) (2001), 2185-2131.
86. E. Jespers and A. Zimmermann,  $SL_2$  action on the cohomology of a rank two abelian group with arbitrary coefficient domain, *Proc. A.M.S.* 130 (2) (2002), 315-325.
87. E. Jespers, S.O. Juriaans, J.M. de Montenegro and J.R. Rogerio, On the normalizer problem, *J. Algebra*, 247 (2002), 24-36. ISSN 0021-8693
88. E. Jespers, J. Okniński, Semigroup algebras and noetherian maximal orders, *J. Algebra* 238 (2001), 590-622. ISSN 0021-8693
89. E. Jespers, Q. Wang, Noetherian Unique Factorization Semigroup Algebras, *Comm. Algebra* 29 (12) (2001), 5701-5716.
90. E. Jespers, Q. Wang, Height one prime ideals in semigroup algebras satisfying a polynomial identity, *J. Algebra* 248 (2002), 118-131. ISSN 0021-8693
91. E. Jespers, A. del Rio, M. Ruiz, Groups generated by two bicyclic units in integral group rings, *J. Group Theory* 5 (2002), 493-511.
92. E. Jespers, S.O. Juriaans, The finite conjugate centre of the unit group of orders in algebras, *J. Group Theory* 6 (1) (2003), 93-102.
93. A. Dooms, E. Jespers, Normal Complements of the Trivial Units in the Unit Group of some Integral Group Rings, *Comm. Algebra* 31 (1) (2003), 475-482.
94. A. Dooms, E. Jespers, S.O. Juriaans, Units in Orders and Integral Semigroup Rings, *J. Algebra* 265 (2003), no.2, 675-689.



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95. E. Jespers, G. Leal, A. Paques, Central Idempotents in Rational Group Algebras of Finite Nilpotent Group, *Journal of Algebra and Its Applications* Vol. 2, No. 1 (2003) 57-62. doi:10.1142/S0219498803000398
  96. T. Gateva-Ivanova, E. Jespers, J. Okniński, Quadratic algebras of skew type and the underlying semigroups, *J. Algebra* 270 (2003), no. 2, 635–659. ISSN 0021–8693
  97. C. Corrales, E. Jespers, G. Leal, A. del Rio, Presentations of the unit group of an order in a non-split quaternion algebra, *Advances in Mathematics* 186 (2004), 498–524.
  98. E. Jespers, J. Okniński, Quadratic algebras of skew type satisfying the cyclic condition (with Okniński), *Int. Journal of Algebra and Computations*, Vol.14. No.4 (2004), 1–20.
  99. A. Dooms, E. Jespers, Generators for a Subgroup of Finite Index in the Unit Group of an Integral Semigroup Ring, *J. Group Theory* 7 no.4 (2004), 543–553.
  100. F. Cedo, E. Jespers, J. Okniński, Semiprime quadratic algebras of Gelfand-Kirillov dimension one, *Int. Journal of Algebra and Applications*, Vol.3 No.3 (2004), 1–18.
  101. A. Dooms, E. Jespers, S. O. Juriaans, On Group Identities for the Unit group of algebras and Semigroup Algebras over an infinite field, *J. Algebra* 284 (2005), no.1, 273–283.
  102. E. Jespers, M. Ruiz, Antisymmetric elements in group rings, *J. Algebra and its Applications* Vol. 4, no.4 (2005), 341–353.
  103. E. Jespers, J. Okniński, Monoids and groups of  $I$ -type, *Algebras and Representation Theory* vol. 8 (no. 5) (2005), 709–729.
  104. E. Jespers, D. Riley, Nilpotent linear semigroups, *Int. J. Algebra Comp*, Vol. 16, No. 1 (2006) 141-160.
  105. E. Jespers, M. Ruiz, On symmetric elements and symmetric units in group rings, *Comm. Algebra* 34 no.2 (2006), 727-736.
  106. F. Cedo, E. Jespers, J. Okniński, The Gelfand-Kirillov dimension of quadratic algebras satisfying the cyclic condition, *Proc. A.M.S.* 134 (2006), 653-663.
  107. E. Jespers, J. Okniński, Noetherian semigroup algebras, *Bulletin of the London Mathematical Society*, Volume 38 (Issue 03) (2006), 421-428.
  108. A. Dooms, A., E. Jespers, M. Ruiz, Free groups and subgroups of finite index in the unit group of an integral group ring, *Comm. Algebra* 35 (2007), no. 9, 2879–2888.
  109. I. Goffa, E. Jespers, Monoids of IG-type and maximal orders, *J. Algebra* 308 (2007), no. 1, 44–62. ISSN 0021–8693

110. M. Hertweck, E. Iwaki, E. Jespers, S.O. Juriaans, On hypercentral units in integral group rings, *J. Group Theory* 10 (2007), no. 4, 477–504.
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112. I. Goffa, E. Jespers and J. Okniński, Primes of height one and a class of Noetherian finitely presented algebras, *Internat. J. Algebra Comput.* 17 (2007), no. 7, 1465–1491.
113. E. Jespers, D. Riley, S. Siciliano, Group identities on the units of algebraic algebras with applications to restricted enveloping algebras, *Journal of Algebra* 319 (2008) 4008–4017.
114. I. Goffa, E. Jespers and J. Okniński, Semigroup algebras of submonoids of polycyclic-by-finite groups and maximal orders, *Algebras and Representation Theory*, 12 (2009) no.2-5, 357-363.
115. O. Broche Cristo, E. Jespers and M. Ruiz, Antisymmetric elements in group rings with an orientation morphism, *Forum Mathematicum*, 21 (2009), no.3, 427–454.
116. M. Hertweck and E. Jespers, Class-preserving automorphisms and the normalizer property for Blackburn groups, *J. Group Theory* 12 (2009) no.1, 157–169.
117. O. Broche, E. Jespers, C. Polcino Milies, M. Ruiz, Antisymmetric elements in group rings II, *J. Algebra and Applications*, Vol. 8, Issue 1 (2009), 115–127.
118. F. Cedó, E. Jespers and A. del Río, Involutive Yang-Baxter Groups, *Trans. Amer. Math. Soc.* 362 (2010), 2541-2558.
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120. I. Goffa, E. Jespers and J. Okniński, Normal domains with monomial presentations, *Int. J. Algebra and Computations*, 19 (2009), no. 3, 287-303.
121. F. Cedó, E. Jespers, J. Okniński The radical of the four generated algebra of alternating type, in: *Contemporary Mathematics, Proceedings of Groups, Rings and Group Rings*, edited by A. Giambruno, C. Polcino Milies and S. K. Sehgal, pp. 1-26, AMS, 2009.
122. F. Cédo, E. Jespers, J. Okniński, Finitely presented algebras and groups defined by permutation relations, *J. Pure and Applied Algebra* Vol. 214 (Issue 7) (2010), 1095-1102.
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  130. G.G. Bastos, E. Jespers, S.O. Juriaans, A.A. Silva, Extension of Automorphisms of Subgroups, *Glasgow Mathematical Journal*, volume 54, issue 02 (2012), 371-380. doi:10.1017/S0017089512000031. ISSN: 0017-0895
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146. E. Jespers, A. Kiefer, A. del Rio, Presentations of Groups Acting Discontinuously on Direct Products of Hyperbolic Spaces, *Mathematics of Computation*, Volume 85, Number 301 (2016), 2515–2552. <http://dx.doi.org/10.1090/mcom/3071>
147. E. Jespers, J. Okninski, Prime ideals in algebras determined by submonoids of nilpotent groups, *Algebras and Representation theory* (2016) 19, 17–31 DOI 10.1007/s10468-015-9559-2 . ISSN 1386–923X
148. F. Cedo, E. Jespers, G. Klein, Group algebras and semigroup algebras defined by permutation relations of fixed length, *Journal of Algebra and its applications*, Vol. 15, No. 2 (2016) 1650037 (7 pages). DOI: 10.1142/S0219498816500377 (online). ISBN-ISSN: 0219-4988
149. F. Cedo, E. Jespers, G. Klein, Construction of a two unique product semigroup defined by permutation relations of quaternion type, *Journal of Algebra* 452 (2016) 196–211. ISSN 0021–8693

150. E. Jespers, J. Okninski, Krull orders in nilpotent groups: corrigendum and addendum, *Archiv der Mathematik* 106 (2016), 295–299. DOI 10.1007/s00013-015-0860-4, ISSN: 0003-889X
151. F. Cedo, E. Jespers, G. Klein, Finitely Presented Monoids and Algebras defined by Permutation Relations of Dihedral Type, *IJAC*, Vol. 26, No. 1 (2016) 171–202. Print ISSN: 0218-1967 Online ISSN: 1793-6500 DOI: 10.1142/S0218196716500089
152. E. Jespers, S. O. Juriaans, A. Kiefer, A. De A. E Silva A. C. Souza, Filho, Dirichlet-Ford domains and Double Dirichlet domains, *Bull. Belgian Math. Soc., Bull. Belg. Math. Soc. Simon Stevin*, Volume 23, Number 3 (2016), 465-479. ISSN: 1370-1444 (print) accepted June 20, 2016, 12 pages.
153. David Bachiller, Ferran Cedo, Eric Jespers, Solutions of the Yang-Baxter equation associated with a left brace, *Journal of Algebra* Vol. 463 (2016), 80–102. DOI information: 10.1016/j.jalgebra.2016.05.024
154. A. Gordienko, G. Janssens, E. Jespers, Semigroup graded algebras and graded pi-exponent, *Israel J. Math.* 220 (2017), no. 1, 387–452. ISSN: 0021-2172 (print version) ISSN: 1565-8511 (electronic version)
155. G. Janssens, E. Jespers, D. Temmerman, Free products in the unit group of the integral group ring of a finite group, *Proc. Amer. Math. Soc.* 145 (2017), no. 7, 2771–2783.
156. D. Bachiller, F. Cedo, E. Jespers, J. Okninski, A family of irretractable square-free solutions of the Yang-Baxter equation, *Forum Math.* 29(6) (2017), 1291–1306. ISSN: 1435-5337
157. D. Bachiller, F. Cedo, E. Jespers, J. Okninski, Iterated matched products of finite braces and simplicity; new solutions of the Yang-Baxter equation, *Transactions of the American Mathematical Society*, *Trans. Amer. Math. Soc.* 370 (2018), no. 7, 4881–4907. ISSN: 0002-9947 (print), 1088-6850 (electronic)
158. E. Jespers, M. Van Campenhout, Finitely generated algebras defined by homogeneous quadratic monomial relations and their underlying monoids II. *J. Algebra* 492 (2017), 524–546. ISSN: 0021-8693
159. David Bachiller, Ferran Cedo, Eric Jespers and Jan Okniński, Asymmetric product of left braces and simplicity; new solutions of the Yang-Baxter equation. *Commun. Contemp. Math.* 21 (2019), no. 8, 1850042, 30 pp. ISSN (print): 0219-1997 — ISSN (online): 1793-6683
160. E. Jespers and A. Van Antwerpen, *Left semi-braces and solutions to the Yang-Baxter equation*, *Forum Math.* (2019) **31**, 241–263, <https://doi.org/10.1514/forum-2018-0039>, ISSN: 1435-5337

161. Eric Jespers, David Riley and Mayada Shahada, On polynomials that are not quite an identity on an associative algebra, *Israel J. Math.* 234 (2019), no. 1, 371–391. ISSN: 0021-2172 (print), 1565-8511 (electronic)
162. Eric Jespers, Lukasz Kubat and Arne Van Antwerpen, The structure monoid and algebra of a non-degenerate set-theoretic solution of the Yang-Baxter equation, *Trans. Amer. Math. Soc.* 372 (2019), no. 10, 7191–7223. ISSN: 0002-9947 (print), 1088-6850 (electronic)
163. Ferran Cedó, Eric Jespers and Jan Okniński, An abundance of simple left braces with abelian multiplicative Sylow subgroups, *Rev. Mat. Iberoam.* 36 (2020), no. 5, 1309–1332. ISSN: 02132230. DOI: 10.4171/rmi/1168
164. E. Jespers, L. Kubat, A. Van Antwerpen, L. Vendramin, Factorization of skew braces, *Math. Ann.* 375 (2019), no. 3-4, 1649–1663. ISSN: 0025-5831 (print), 1432-1807 (electronic)
165. Ferran Cedó, Eric Jespers and Jan Okninski, Set-theoretic solutions of the Yang–Baxter equation, associated quadratic algebras and the minimality condition, *Rev. Mat. Complut.* 34 (2021), no. 1, 99–129.
166. Eric Jespers, Lukasz Kubat and Arne Van Antwerpen, Corrigendum and Addendum to “The structure monoid and algebra of a non-degenerate set-theoretic solution of the Yang–Baxter equation”, *Trans. Amer. Math. Soc.* 373 (2020), 4517–4521. <https://doi.org/10.1090/tran/8057>
167. Ferran Cedó, Eric Jespers and Jan Okninski, Every finite abelian group is a subgroup of the additive group of a finite simple left brace, *J. Pure Appl. Algebra* 225 (2021), no. 1, Paper No. 106476, 10 pp.
168. F. Cedó, E. Jespers, C. Verwimp, Structure monoids of set-theoretic solutions of the Yang-Baxter equation, *Publ. Mat.* 65 (2021), 499–528.
169. I. Colazzo, E. Jespers, L. Kubat, Set-theoretic solutions of the Pentagon Equation, *Comm. Math. Phys.* 380 (2020), no. 2, 1003–1024.
170. E. Jespers, Structure of group rings and the group of units of integral group rings: an invitation, *Indian J. Pure Appl. Math.* 52 (2021), no. 3, 687–708. <https://doi.org/10.1007/s13226-021-00179-5>.
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172. Andreas Bächle, Mauricio Caicedo, Eric Jespers and Sugghanda Maheshwary, Global and local properties of finite groups with only finitely many central units in their

- integral group ring, *J. Group Theory* 24 (2021), no. 6, 1163–1188, DOI 10.1515/jgth-2020-0165
173. Eric Jespers, Wei-Liang Sun, Nilpotent decomposition in integral group rings. *J. Algebra* 575 (2021), 127–158.
174. Andreas Bächle, Geoffrey Janssens, Eric Jespers, Ann Kiefer and Doryan Temmerman, Abelianization and fixed point properties of units in integral group rings, *Math. Nachrichten* (MANA2514), 47 pages, Article DOI: 10.1002/mana.202000514, to appear, accepted January 16, 2021.
175. F. Cedo, E. Jespers, J. Okninski, Primitive set-theoretic solutions of the Yang-Baxter equation, *Communications in Contemporary Mathematics*, Vol. 24, No. 09, 2150105 (2022).
176. Ferran Cedó, Eric Jespers, Charlotte Verwimp, Corrigendum to “Structure monoids of set-theoretic solutions of the Yang–Baxter equation”, 9 pages, *Publ. Mat.*, accepted 22 March 2022.
177. Andreas Bächle, Geoffrey Janssens, Eric Jespers, Ann Kiefer and Doryan Temmerman, A dichotomy for integral group rings via higher modular groups as amalgamated products, *J. Algebra* 604 (2022), 185–223.
178. I. Colazzo, E. Jespers, A. Van Antwerpen and C. Verwimp, Left non-degenerate set-theoretic solutions of the Yang-Baxter equation and semitrusses, *Journal of Algebra* 610 (2022) 409–462.
179. Ferran Cedo, Eric Jespers, Lukasz Kubat, Arne Van Antwerpen, Charlotte Verwimp, On various types of nilpotency of the structure monoid and group of a set-theoretic solution of the Yang–Baxter equation, 35 pages, *Journal of Pure and Applied Algebra* 227 (2023), no. 2, Paper No.107194.
180. E. Jespers, A. Van Antwerpen, L. Vendramin, Nilpotency of skew braces and multipermutation solutions of the Yang-Baxter equation, *Communications in Contemporary Mathematics* (2022) 2250064 (20 pages), DOI: 10.1142/S021919972250064X.

### 1.1.2 Publications in conference proceedings with refereeing

1. E. Jespers, P. F. Smith, Maximal orders and group rings, *Proceedings of “Methods in Ring Theory”*, NATO ASI 1983 UIA Antwerp, Ed. F. Van Oystaeyen, D. Reidel Publ. Co., Dordrecht, 1984.
2. E. Jespers, The group of units of a commutative semigroup ring of a torsion-free semigroup, *Proc. Int. Conf. on Group and Semigroup rings*, North Holland, Mathematics studies 126, Ed. G. Karpilovsky 1986, 35-41.

3. E. Jespers, P. Wauters, A description of the Jacobson radical of semigroup rings of commutative semigroups, *Proc. Int. Conf. on Group and Semigroup rings*, North Holland, Mathematics studies 126, Ed. G. Karpilovsky, 1986, 43-89.
4. E. Jespers, Semigroup graded rings and Jacobson rings, *Lattices, Semigroups and Universal Algebra*, Edited by J. Almeida et al., Plenum Press, New York, 1990, 105-114.
5. E. Jespers, Graded rings and Jacobson rings, *Proc. 1988 Sendai Conf.*, Radical Theory, Uchida Rokakuho Publ. Co., Tokyo, 1989, Ed. S. Kyuno, 57-66.
6. E. Jespers, The Jacobson radical of graded rings, *Atas da XI Escola de Algebra, Sociedade Brasileira de Matemática*, 18(Vol. 1)(1990), 111-119.
7. E. Jespers, Radicals of graded Rings, Theory of radicals, ed. L. Márki and R. Wiegandt, Proc. Conf. Szekszárd (Hungary) 1991, Colloq. Math. Soc. J. Bolyai 61, North Holland, Amsterdam, 1993.
8. E. Jespers, M.M. Parmenter, P.F. Smith, Revisiting a theorem of Higman, *Proc. Groups '93, Galway/St.Andrews, Vol. 1.* ed. C.M. Campbell, T.C. Hurley, E.F. Robertson, S.J. Tobin and J.J. Ward, London Math. Soc. Lect. Notes Series 212, Cambridge Univ. Press, Cambridge, 1995, 269–273.
9. E. Jespers, Units in integral group rings: a survey, Proc. Int. Conf. on “Methods in Ring Theory”, Trento 1997, Marcel Dekker, Lect. Notes in Pure and Applied Mathematics, Vol. 198, 1998, pages 141–169.
10. E. Jespers and J. Okniński, Noetherian Semigroup Algebras - a survey, Proc. Euroconference on “Interactions between ring theory and representation theory”, ed. F. Van Oystaeyen and M. Saorin, Lect. Notes in Pure and Appl. Math., Vol. 210, pp. 253–276, Marcel Dekker, 2000.
11. E. Jespers, S.O. Juriaans, J.M. de Montenegro and J.R. Rogerio, A note on the normalizer conjecture, *Mathematica Contemporânea* Vol. 21 (2001), 117-130.
12. E. Jespers, Constructing Noetherian Algebras, Conf. proc. of the int. meeting “Groups, Rings, Lie and Hopf algebras, St.John’s, Kluwer Academic Press, Math. and its Applications, ed. Y. Bahturin, 2003, pp 55-73.
13. E. Jespers, On some problems of units in integral group rings, *Resenhas IME-USP* (2002), vol.5, no.4, 351–361.
14. E. Jespers, J. Okniński, Quadratic algebras of skew type, Proceedings of the International Conference on Algebras, Modules and Rings, Lisbon 2003, editors A. Facchini, K.R. Fuller, C.M. Ringel and C. Santa Clara; *Algebras, rings and their representations*, 93–112, World Sci. Publ., Hackensack, NJ 2006.



15. A. Dooms, E. Jespers, Units in noncommutative orders, Proc. in honour of C. Polcino Milies, Groups, rings and group rings, 119–136, Lect. Notes Pure Appl. Math., 248, Chapman & Hall/CRC, Boca Raton, FL, 2006.
16. E. Jespers, Semigroup Algebras and Noetherian Maximal Orders: a survey, Proceedings of the International Conference on Groups, Rings, Lie and Hopf Algebras, Aug.15-18, Memorial University of Newfoundland, Acta Applicandae Mathematicae, Volume 108 (1) (2009), 83-99.
17. E. Jespers, Z. Marciniak, G. Nebe, and W. Kimmerle, Mini-Workshop: Arithmetik von Gruppenringen. [Mini-Workshop: Arithmetic of Group Rings] Abstracts from the mini-workshop held November 25–December 1, 2007. Organized by Eric Jespers, Zbigniew Marciniak, Gabriele Nebe and Wolfgang Kimmerle. Oberwolfach Reports. Vol. 4, no. 4. Oberwolfach Rep. 4 (2007), no. 4, 3209–3239. 16S34 (20C05 20C07)
18. E. Jespers, Groups and set theoretic solutions of the Yang-Baxter equation, Note di Matematica 30, no.1 (2010), 1–12.
19. Eric Jespers, Victoria Lebed, Wolfgang Rump, Leandro Vendramin, Mini-Workshop: Algebraic Tools for Solving the Yang-Baxter Equation, Journals Oberwolfach Reports, vol. 16, no. 4, 3207–3242

### 1.1.3 Publications in conference proceedings without refereeing

1. E. Jespers, Units of integral group rings, *Proc. Chinese-Japanese First Int. Symposium on Ring Theory*, Guilin, 1991, 71-73.
2. E. Jespers, Units of integral group rings of finite groups, Proc. 2nd Japan-China Int. Symposium on Ring Theory and the 28-th Symposium on Ring Theory, Okayama Univ. of Science, Okayama, 53–57, 1996.

### 1.1.4 Publications: books

1. E. G. Goodaire, E. Jespers and C. Polcino Milies, Alternative loop rings, North-Holland Mathematics Studies Vol.184, Amsterdam, 1996.
2. E. Jespers and J. Okninski, Noetherian semigroup algebras, Series: Algebra and Applications, Vol. 7, Springer, 2007. Hardcover ISBN-10: 1-4020-5809-8 ISBN-13: 978-1-4020-5809-7
3. E. Jespers, A. del Rio, Group Ring Groups, Vol 1: Orders and Generic Constructions of Units, Volume I, De Gruyter, Berlin, 447 pages, 2015. ISBN 978-3-11-037278-6, eBook (PDF) ISBN 978-3-11-037294-6, eBook (EPUB) ISBN 978-3-11-038617-2. 2015.

4. E. Jespers, A. del Rio, Group Ring Groups, Vol 2: Structure Theorems of Unit Groups, De Gruyter, Volume II, De Gruyter, Berlin, 217 pages. 2015. ISBN 978-3-11-041149-2, eBook (PDF) ISBN 978-3-11-041150-8, eBook (EPUB) ISBN 978-3-11-041275-8.

### Results appearing in other books

Several of my results (published in journals) have been incorporated in books written by other authors. Several of these books have already become standard references.

1. G. Karpilovsky, *The Jacobson radical of classical rings* (Wiley, New York, 1991).  
This book contains (amongst other) most of my results (up to 1990) on prime ideals and the Jacobson radical of graded rings and semigroup rings.
2. J. Okniński, *Semigroup Algebras*, Marcel Dekker, New York, 1991.  
This book is a survey of most results on the algebraic structure of semigroup algebras (up to the time it was written). Several of my results are mentioned.
3. J. Okniński, *Semigroups of Matrices*, World Scientific, Singapore, 1998.  
This book gives a complete survey on the theory of linear semigroups. This theory is very useful in the study of noetherian rings and the algebraic structure of semigroup algebras. On these topics, the book contains several of my results joint with Okniński.
4. S.K. Sehgal, *Units in Integral Group Rings*, Longman, 1993.  
This book gives a complete survey (up to 1992) on the results concerning the unit group of integral group rings of a finite group. Several of my results have been included, such as, the solution of constructing finitely many concrete generators of a subgroup of finite index.
5. A. Kelarev, *Ring constructions and applications*, Series in Algebra, 9, World Scientific Publishing Co., Inc., River Edge, NJ, 2002. This book contains several of my results on graded rings.
6. C. Polcino Milies, S.K. Sehgal, *An introduction to group rings, Algebras and Applications*, 1. Kluwer Academic Publishers, Dordrecht, 2002. This book contains several of my results on units in group rings.

### 1.1.5 Papers submitted for publication

1. I. Colazzo, E. Jespers, L. Kubat, A. Van Antwerpen, C. Verwimp, Finite Idempotent set-theoretic solutions of the Yang–Baxter equation

### 1.1.6 Papers in preparation

1. G. Janssens, E. Jespers, O. Schnabel, Units of twisted group rings and their correlations to classical group rings.
2. I. Colazzo, E. Jespers, L. Kubat, Arne Van Antwerpen, Structure algebras of finite set-theoretic solutions of the Yang-Baxter equation
3. I. Colazzo, E. Jespers, L. Kubat, Arne Van Antwerpen, Simple solutions of the Yang-Baxter equation I. Colazzo, E. Jespers, L. Kubat, Arne Van Antwerpen, Cubic solutions of the Yang-Baxter equation

## 1.2 DOCTORAL STUDENTS SUPERVISED

1. F. Decruyenaere, 1988-1991, ph.d.: Divisibility Properties of Rings, doctoral degree awarded January 1991, K.U. Leuven.
2. M. Clase, 1990-1993, ph.d.: Semigroup graded rings. doctoral degree awarded August 1993, Memorial University of Newfoundland.
3. D. Wang, 1992-1995, ph.d.: Units of semigroup rings, doctoral degree awarded August 1995, Memorial University of Newfoundland.
4. Q. Wang, 1996-1999, ph.d.: Hereditary semigroup rings and maximal orders, doctoral degree awarded April 2000, Memorial University of Newfoundland.
5. A. Dooms (FWO), ph.d.: Units in non-commutative orders, doctoral degree awarded March 2004, VUB.
6. I. Goffa (IWT), 2005-2008, ph.d.: Noetherian semigroup algebras and prime maximal orders, doctoral degree awarded April 2008.
7. M. H. Shahzamanian, Finite semigroups and their non-nilpotent graphs, 2010-2012, VUB, doctoral degree awarded dec. 2012.
8. A. Kiefer, FWO, Units in Integral Group Rings via Fundamental Domains and Hyperbolic Geometry, doctoral degree awarded May 2014.
9. Georg Klein, Finitely presented algebras defined by permutation relations, doctoral degree granted October 2014.semigroups
10. I. Van Gelder, Group representations: idempotents in group algebras and applications to units, 2010-2015, VUB, doctoral degree awarded March 2015.
11. M. Van Campenhout, Finitely generated algebras defined by homogeneous quadratic monomial relations and their underlying monoids, 2010-2016, VUB, doctoral degree awarded September 2016.
12. G. Janssens, Identities of Affine Algebras and their asymptotic behaviour, 2012-2018, VUB, doctoral degree awarded May 19, 2017.
13. A. Van Antwerpen, The algebra of the Yang-Baxter equation, 2016-2020, doctoral degree awarded June 2020.
14. D. Temmerman, Fixed point properties for low rank linear groups over orders and applications to integral group rings, May 2019.
15. Charlotte Verwimp, Set-theoretic solutions of the Yang-Baxter equation and associated algebraic structures, May 2022.

### 1.3 POST-DOCTORAL FELLOWS SUPERVISED

1. Dr. G. Leal, University of Rio de Janeiro (Brazilië), research: units of integral group and loop rings, co-promotor E. Goodaire, 1988-1989.
2. Dr. L. Xavier de Barros, University of Sao Paulo (Brazilië), research: units of integral group rings, co-promotor E. Goodaire, 1992-1993.
3. Dr. S.O. Juriaans, University of Sao Paulo (Brazilië), research: isomorphism problem of integral group rings, co-promotor E. Goodaire, February - August 1997.
4. M. Ruiz, University of Cartagena (Spain), research: group rings and involutions, October 2003- March 2004.
5. A. Dooms, post-doc FWO, 2004-2007, research: units in orders.
6. P. Veloso, Rio de Janeiro (Brazil), research: Units in  $Z$ -orders, 1 feb 2005 - 1 feb 2006
7. A. Konovalov, Zaporozhye National University, Ukraine, post-doc, Franqui Fund, feb-dec 2006
8. G. Olteanu, North University of Baia Mare (Romania) and University of Murcia, Spain, February 2009 - February 2010.
9. F. Eisele, project: groups, group rings and the Yang-Baxter equation, March 5 2012-September 30, 2015.
10. A. Gordienko, project: polynomial identities, Oct. 2012 - Sept. 2018.
11. A. Bächle, project: units of group rings, 1 Oct. 2013 - 30 Sept. 2019.
12. E. Iwaki, project: semigroup algebras, 1 Feb. 2014 - 31 Jan. 2015.
13. M. Caicedo, groups, group rings and the Yang-Baxter equation, 1 April 2014 - 1 February 2016.
14. A. Kiefer, unit groups of orders, 1 october 2014 - 30 september 2019.
15. M. Caicedo, The Zassenhaus conjecture of integral group rings, 1 October 2016- 30 September 2019.
16. S. Spenko, Non-commutative geometry, 1 Oct 2017 - 30 Sept 2020.
17. L. Margolis, Units of group rings, 1 Oct. 2017 - 30 Sept 2020.
18. L. Kubat, Braces and Units of group rings, 1 Jan. 2018 - 30 Dec. 2020.
19. G. Janssens, Distinguishing Groups and Algebras via Growth Functions and Representations, 1 Oct. 2018 - 30 Sept. 2021.

20. I. Colazzo, Algebraic structures associated to set-theoretic solution of the Yang-Baxter equation, Sept 1 - Nov 30 2018 and 1 Oct. 2019 - 28 Feb 2021.

## 1.4 CONFERENCES

### 1.2.1 INVITED MAIN SPEAKER AT CONFERENCES

year	conference	location
1985	International Conference on "Radicals - Theory and Applications" Lecture: Radicals of semigroup rings of commutative semigroups	Krems, Austria
1986	South African Mathematical Society Meeting Lecture: The behaviour of the structure of rings under some algebraic constructions	Johannesburg, South Africa
1988	International Conference on Radicals - Theory and Applications Lecture: Graded Rings and Jacobson Rings	Tohoku University Sendai, Japan
1991	International Conference on Radical Theory Lecture: Radicals of graded rings	Szekszard, Hungary
1993	International Conference : Contact Franco-Belge en Algebre VI.	
1994	Int. Conference on "Groups and Group Rings", Lecture: Units of group rings	Gliwice, Poland
1997	Int. Conf. on "Methods in Ring Theory" lecture: Units in integral group rings, a survey	Trento, Italy 20-23 May
1997	Int. Conf. on "Theory of radicals and rings" lecture: Noetherian semigroup algebras	Port Elizabeth 7-11 July
1998	Int. Conf. on "Interactions between Ring Theory and Representation of Algebra" lecture: Noetherian Semigroup Algebras	Murcia, Spain 12-17 Jan.
1999	Contact group FNRS Lecture: Units of integral group rings	Mons 15 Feb. 1999
2001	Workshop on "Groups, Rings, Lie and Hopf Algebras" Two Lectures : Construction of noetherian algebras	St. John's, Canada 28 may - 1 june
2001	Int. Conf. on "Representation theory around the channel" Lecture: Special subgroups of the unit group of integral group rings	31 Aug - 1 September. Amiens, France

- |      |   |  |
|------|---|--|
|      | Lecture: Constructing Noetherian Algebras   |  |
| 2002 | Int. Conf. on "Around group rings"  | 18-21 feb.                               |
|      | Lecture: Some problems in group rings   | Jasper, Canada                           |
| 2003 | Int. Conf. on "Groups and Group Rings X"  | 10-14 june                               |
|      | Lecture: Units of Integral group rings  | Wisla (Poland)                           |
| 2003 | Brazilian Mathematical Colloquium   | 27 july - 1 aug.                         |
|      | Lecture: Units of integral group rings  | Rio de Janeiro (Brazil)                  |
| 2004 | Caen Journée d'Algèbre  | Caen (France)                            |
|      | Lecture: Quadratic algebras and monoids of skew type  | March 19, 2004                           |
| 2005 | Groups and Group Rings 11   | Bedlewo , Poland                         |
|      | Lecture: Quadratic algebras and groups of I-type  | June 4-June 11                           |
| 2007 | Groups, Rings, Lie and Hopf Algebras. II  | Newfoundland                             |
|      | Lecture: Primes of height one and a class of Noetherian finitely presented algebras   | August 13-17                             |
| 2007 | NONCOMMUTATIVE RINGS AND GEOMETRY   | Almeria, Spain                           |
|      | Lecture: A class of Noetherian finitely presented algebras  | 18-22 sept                               |
| 2007 | Workshop "Arithmetik von Gruppenringen"   | Oberwolfach (Germany)                    |
|      | Lecture: Semigroup Rings  | Nov. 25 - Dec. 1                         |
| 2008 | Int. Conf. "Groups, Rings and Group Rings 2008"   | Ubatuba, Brazil                          |
|      | Lecture: Groups and group algebras and the Yang-Baxter equation   | July 28 - August 2                       |
| 2009 | International Workshop/Core Session of Summer 2009 Meeting of the Canadian Mathematical Society on "Groups and Hopf Algebras" | June 3-8<br>St. John's, NL<br>Canada     |
|      | Lecture: Idempotents in group algebras  |  |
| 2009 | Lecce Int. Conf. on "Advances in Group Theory and Applications"   | Porto Cesareo, Lecce<br>Italy, June 8-12 |
|      | Lecture: Groups and Set Theoretic Solutions of the Yang-Baxter equation   |  |
| 2010 | International Conference "Groups and their actions"   | Bedlewo, Poland                          |
|      | Lecture: Groups, Group Rings and Set Theoretic Solutions of the Yang-Baxter equation  | August 23-28                             |
| 2010 | Darstellungstheoretage  | Stuttgart, Germany                       |
|      | Lecture: Yang-Baxter groups and group rings   | June 5-6                                 |
| 2011 | International Conference on   | Porto Cesareo (Lecce), Italy)            |



- “Advances in Group Theory and Applications”  
 Series of 3 Lectures on  
 Rational representations and units of integral  
 group rings of finite groups  
 June 7- 10.
- 2011 International Conference on  
 “Groups, Rings and Group Rings”  
 Lecture: Generators of the unit group  
 of integral group rings  
 Edmonton (Canada)  
 July 11-15
- 2012 International Conference on  
 “Group Rings and related topics”  
 Lecture : Central Units of Group Rings  
 Stuttgart (Germany)  
 June 25-29
- 2012 Conference on ”Garside theory  
 state of the art and prospects”  
 Lecture: Groups, Groups Rings and the Yang-Baxter  
 equation  
 Cap Hornu (France)  
 May 30 - June 2
- 2012 Workshop on “ Algebraic Monoids, Group  
 Embeddings  
 and Algebraic Combinatorics”  
 Series of Three Lectures on  
 “Units of Integral Group Rings and The Yang-Baxter  
 Equation”  
 Fields Institute (Canada,  
 Toronto)  
 July 3-6
- 2012 International Conference on  
 “Groups, Rings, Lie and Hopf Algebras III”  
 Lecture : Groups, Group Rings and The Yang-Baxter  
 Equation”  
 Bonne Baie Marine Station  
 (Canada)  
 August 12-18
- 2012 International Conference on  
 “Groups, Rings and Group Rings”  
 Lecture: Groups, Group Rings and The Yang-Baxter  
 Equation  
 Ubatuba (Brazil)  
 July 22-28
- 2014 International Confrence  
 Groups, Rings and Group Rings  
 Lecture : Krull orders in nilpotent groups  
 Brock Univ (Canada)  
 July 28 - Aug 2
- 2015 International Conference on  
 Groups and their actions  
 Lecture: Group Ring Groups  
 22-26 june  
 Bedlewo (Poland)  
 Stefan Banch Center
- 2015 Internationale workshop on  
 non commutative algebras and geometry  
 Lecture : Group Ring Groups  
 5-8 sept.  
 China, Yangzhou,
- 2016 2nd International Conference On Algebra  
 in Honour of Leonid BOKUT  
 and Surender K. JAIN  
 August 26–29  
 Balikesir-Turkey  
 cancelled because of coup

- Lecture: Group Ring Groups  
Conference cancelled because of coup
- 2017 Int. Workshop "Combinatorics of Group Actions and its Applications" Aug. 28 - Sept. 1  
St. John's, Canada
- Lecture: Groups, Rings, Braces and Set-theoretic solutions of the Yang-Baxter Equation
- 2017 Group, Group Rings & Related Topics (GRRRT 2017) Nov. 20–23  
Khorfakkan, UAE
- Lecture: Groups, Rings, Braces and Set-theoretic Solutions of the Yang-Baxter Equation
- 2018 Noncommutative and non-associative structures, braces and applications Malta  
March 11–15
- Lecture: Groups, Rings, Braces and Set-theoretic Solutions of the Yang-Baxter Equation
- 2018 II International Joint Meeting Spain-Brazil in Mathematics Cadiz, Spain  
Dec. 11–14
- Lecture: Groups, Rings, Braces and Set-theoretic Solutions of the Yang-Baxter Equation
- 2019 International Conference on Advances in Group Theory and Applications 2019 Lecce, Italy  
June 25–28
- Lecture: The structure monoid and algebra of a non-degenerate set-theoretic solution of the Yang-Baxter equation
- 2019 International Conference on "Polynomial Identities in Algebras" Sept. 16-20  
Roma (Italy)
- Lecture: The structure algebra of a non-degenerate set-theoretic solution of the Yang-Baxter equation
- 2019 International Workshop on Group Algebras Representations and Computation ICTS Bangalore, INDIA  
October 14–23 October 2019
- 3 Lectures on "Structure of group algebras and units of integral group rings?"  
Lecture on "Set theoretic solutions of the Yang-Baxter equation and its associated structures"

## 1.2.2 INVITED CONFERENCE SPEAKER

Year	Conference	location
1982	Conference in honour of Emmy Noether, Lecture: Central $\Omega$ -Krull Rings	Antwerp
1982	Belgian Mathematical Society Meeting Lecture: $\Omega$ -Krull Rings	Antwerp
1982	International Conference on "Theory of Radicals" Lecture: On radicals of graded rings	Eger, Hungary
1984	South African Mathematical Society Meeting Lecture: Group rings and maximal orders	Grahamstown, South Africa
1985	International Conference on "Classical and Categorical Algebra" Lecture: Polynomial rings and non-commutative Krull rings	Durban, South Africa
1985	International Conference on "Group and Semigroup Rings" Lecture: The Jacobson radical of semigroup rings of commutative semigroups	Johannesburg, South Africa
1985	Workshop on "Algebraic geometry" Lecture: On non-commutative Krull rings	Pretoria, South Africa
1986	South African Mathematical Society Meeting Lecture: Chain conditions and semigroup graded rings	Johannesburg, South Africa
1988	International Conference on Universal Algebra, Lattices and Semigroups Lecture: Semigroup Graded Rings and Jacobson Rings	Centro de Algebra University of Lisbon, Portugal
1989	Canadian Mathematical Society, Summer Meeting Lecture: Prime Ideals of Graded Rings and Related Matters.	Univ. of Windsor, Canada
1989	Atlantic Algebra Day Lecture: The Jacobson and Brown McCoy Radicals of Graded Rings	Mount Allison Univ., Canada
1990	XI-th School of Algebra Lecture: The Jacobson Radical of Graded Rings	Univ. of Sao Paulo, Brasil

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| 1991 | China-Japan First International Symposium on Ring Theory<br>Lecture: Units of Integral Group Rings  | Guilin, China                            |
| 1992 | III Week on Algebra and Algebraic Geometry<br>Lecture: Units of Integral Group Rings  | Puerto de la Cruz<br>Tenerife, Spain     |
| 1992 | VII-th School of Algebra,<br>Lecture: Generators of large subgroups of the unit group of integral group rings   | Diamantina, Brasil                       |
| 1994 | Int. Conference on "Abelian groups and modules",<br>Lecture: Graded rings with finite support and descending chain conditions   | Padova, Italy                            |
| 1995 | Int. Conference "US Science Days 1995",<br>Lecture: Units of integral group rings   | Antwerp                                  |
| 1995 | Second Japanese-Chinese Symposium on Ring Theory Conference<br>Lecture: Units of Integral Group Rings   | Okayama, Japan                           |
| 1996 | Ring Theory Conference<br>Lecture: Abelian Centralisers and Units of integral group rings   | Miskolc, Hungary<br><br>15-20 July 1996  |
| 1997 | Workshop on Hopf Algebras and Group Rings<br>lecture: Central Idempotents and Units of Rational Group Algebras of Alternating Groups  | St. John's, Canada<br>5-10 mei           |
| 1999 | Orders in Arithmetic and Geometry 1999<br>Lecture: Structure Theorems of the unit group of integral group rings<br>lecture presented by A. del Rio (co-author)                                    | 17-23 Jan.<br>Oberwolfach, Duitsland     |
| 1999 | Canadian Mathematical Society<br>Summer Meeting 1999<br>Perspectives in Ring Theory<br>Lecture: Isomorphisms of integral group rings of infinite groups<br>presented by S.O. Juriaans (co-author) | St. John's, Canada<br>29 may - 1 june    |
| 1999 | The third Korea-China-Japan<br>symposium on ring theory and<br>the second Korea-Japan<br>joint seminar  | Kyungju, Korea<br>28 June - 3 July, 1999 |

- Lecture: Noetherian semigroup algebras
- 2001 Workshop: Noetherian algebras and Quantum groups Brussels, Belgium  
Koninklijke Vlaamse Academie van België 14 may 2001  
lecture: Construction of Noetherian Algebras
- 2001 Workshop: The unit group of orders Brussels, Belgium  
lecture: Constructions of units in integral group rings 16-18 may 2001
- 2000 Workshop on “Concrete Ring Theory” Warsaw, Poland  
Lecture: Semigroup algebras and maximal orders 11-23 june
- 2001 Belgian and German mathematical societies first Liege, Belgium  
meeting  
lecture: Subgroups of the unit group of group rings 8-10 June 2001
- 2001 The Fifth International Conference Groups and Bialystok, Poland  
Group Rings  
Lecture: The finite conjugacy centre of integral group 18-23 june  
rings
- 2004 Workshop/Session of Canadian Mathematical Society June 12-15, Halifax, Canada  
Meeting “Hopf Algebras and Related Topics”  
Lecture: Quadratic algebras defined by homogeneous  
quadratic relations
- 2005 Connections between Groups, Rings and Algebras 10-12 june 200  
A Conference in Honor of Donald S. Passman’s 65-th Madison, WI, USA  
Birthday  
Lecture: Quadratic algebras and groups of I-type
- 2006 Int. Conf. Noncommutative algebra 31 aug - 6 sept  
a satellite conference in ICM 2006  
Granada, Spain  
Lecture: The Gelfand-Kirillov dimension  
of quadratic algebras satisfying the cyclic condition
- 2007 International Conference on Algebraic Alden-Biesen, Belgium  
and combinatorial methods in concrete 2-6 sept  
classes of algebras and groups  
Lecture: Finitely presented abelian maximal orders
- 2010 International Workshop on RWTH Aachen Univ.  
Arithmetic of group rings March 21-26  
and related structures  
Lecture: Rational Group Algebras of Finite groups:  
from idempotents to units of integral group rings
- 2014 International workshop on Banff, BIRS

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|      | Algorithms for Linear Groups  | Canada                                     |
|      | Lecture: Unit groups of integral group rings  | 16-21 Nov                                  |
| 2015 | International Conference on<br>on Groups, Rings, Group Rings and Hopf Algebras<br>celebrating the 75th birthday<br>of Professor Donald S. Passman | October 2-4<br>Loyola University, Chicago, |
|      | Lezing: Group Ring Groups   |  |
| 2016 | Brauer groups, Hopf algebras and monoidal categories<br>A conference in honour of Stef Caenepeel<br>on the occasion of his 60th birthday          | 24-27 may<br>Turin, Italy                  |
|      | Lecture: Finitely generated algebras defined by ho-<br>mogeneous quadratic<br>monomial relations and their underlying monoids                     |  |
| 2019 | Workshop on “Algebraic Tools for Solving the Yang-<br>Baxter Equation”  | Oberwolfach                                |
|      | Lecture: Associative structures associated to<br>set-theoretic solutions of the Yang-Baxter equation  | Nov. 10-16                                 |

### 1.2.3 PARTICIPATION IN CONFERENCES

<b>year</b>	<b>Conference</b>	<b>location</b>
1979	Belgian Mathematical Society Meeting	Brussels
1980	International Conference on "Orders and related things"	Antwerp
1980	Belgian Mathematical Society Meeting	Louvain-la-Neuve
1981	International Conference on "Brauer groups and its applications to algebraic geometry"	Antwerpen
1986	Goldie Meeting	Leeds, England
1986	Ring Theory Meeting	Leeds, England
1988	Filtered Rings	Univ. of Antwerp
1989	International Amitsur Conference	Ramat Gan, Israel
1989	Malcev International Conference on Algebra	Novosibirsk, USSR
1990	Belgian Mathematical Society Meeting Conference in Honour of Jacques Tits	Brussel
1993	International Conference on "Commutative algebra: commutative rings and their modules"	Almeria, Spanje
1995	Canadian Mathematical Society - 50th Anniversary - Summer meeting	Toronto, Canada
1997	Conf. on "Group rings and representations" Feb. 17- 21	Kananaskis Alberta, Canada
2003	Hopf Algebra Workshop Nov. 13	VUB
2004	Hopf algebras in non-commutative geometry and physics Feb. 26, 2004	VUB
2005	Mathematics Quo Vadis	April 29, Brussels
2005	Ph.D.-day	Oct. 19, Brussels
2006	Int. Conf. on New Techniques in Hopf algebras and Graded Ring Theory Brussels, Belgium	19-23 sep.
2007	Groups and their actions	Bedlewo, Poland July 1-7, 2007
2007	Advances in Group Theory and Applications 2007	Otranto, Italy 4-8 june

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2008	International Conference “Rings and Modules”	Lisbon, Portugal 15-20 sept.
2009	BMS-LMS Conference	Leuven, Belgium 4-5 dec.
2013	Int. Conference Ring Theory, Group Rings and Representation Theory of Algebras Member scientific committee	Murcia (Spain) june 3-8
2014	Ischia Group Theory 2014	Ischia, Italy 1-5 april
2014	Int. Conf on ”Discrete Groups and Geometric Structures, with Applications V”	K.U. Leuven 2-6 june
2015	Int. Conf. on ”Advances in Group Theory and Applications 2015”	Porto Ceasareo (Italy) 15-19 june
2017	Int. Conf. ”Advances in Group Theory and Applications 2017”	Lecce, Italy Sept. 5-8
2017	Int. Conf. ”Advances in Noncommutative Algebra”	Tel Aviv, Israel June 25-29



### 1.2.4 COLLOQUIA

<b>year</b>	<b>colloquium lecture</b>	<b>location</b>
1992	Units of Integral Group Rings	Dalhousie University (Halifax, Canada)
1996	Units of integral group rings	Univ. New Brunswick (Canada)
1997	Units of Integral Group Rings	Univ. of Colorado at Colorado Springs
1997	Colloquium lecture	University of Cape Town
1999	Units of integral group rings	University of Bielefeld, Germany)
2008	Groups, Semigroups and their Algebras and the Yang-Baxter equation	University of Haifa, Israel
2009	Monoids and Groups of $I$ -type and their Algebras	University of Glasgow, Scotland
2009	Finitely presented algebras and semigroups defined by permutation relations	University of St. Andrews, Scotland
2014	Units of integral group rings of finite groups	Univ. de Fribourg, 4 Nov.
2016	Group Ring Groups	University of Bielefeld, 21-22 April

### 1.2.5 ORGANISATION OF CONFERENCES

1. Organisation of the conference “Atlantic Algebra Day,” , joint with M. Beattie (Mount Allison University, Canada), 27-28 October 1989, Mount Allison University, Sackville, New Brunswick, Canada. This was a national conference (Canadian) with participation of some international experts.
2. Organisation of the international workshop “Hopf algebras and Group Rings”, joint with M. Beattie (Mount Allison University, Canada), St. John’s, 5-10 may 1997.
3. Organisation of the ring theory session “Perspectives in Ring Theory”, joint with E.G. Goodaire (Memorial University of Newfoundland, Canada) , during the Canadian Mathematical Society Summer Meeting in St.John’s, Newfoundland, Canada, 29 May - 1 June 1999. This was a national conference. The ring theory session mainly had an international level (participation).
4. Organisation of the workshop “Concrete Ring Theory”, joint with J. Okninski (University of Warsaw, Poland), Warsaw, Poland, 12-23 June, 2000. Only invited specialists participated: 10 Polish and 10 from other countries.
5. Organisation of the workshop “Finitely presented algebras, groups and monoids”, joint with J. Okniński (Univ. Warsaw, Poland), sept. 1-5, 2003, Alden-Biesen, Belgium.
6. Organisation of the workshop “Groups, algebras and geometries”, joint with J. Okniński (Univ. Warsaw, Poland), K. Dekimpe and P. Igodt (KULAK), august 23-29, 2004, Alden-Biesen, Belgium.
7. Organiser of the international conference ”Groups and Group Rings 11”, joint with Kimmerle, Marciniak, BaginskSt.Catharinei, Krempa, Macedonska, June 4-11, 2005, Bedlewo, Poland.
8. Organisation of the workshop “Algebraic and combinatorial methods in concrete classes of algebras and groups”, joint with J. Okniński (Univ. Warsaw, Poland), sept. 2-7, 2007, Alden-Biesen, Belgium.
9. Organisation of Workshop “Arithmetik von Gruppenringen”, joint with Z. Marciniak (Warsaw), G. Nebe (Aachen) W. Kimmerle (Stuttgart), November 25 - December 1, 2007, Oberwolfach, Germany.
10. Organisation of International Workshop/Special Session of Summer 2009 Meeting of Canadian Mathematical Society, joint with Y. Bahturin (St.John’s and Moscow), M. Beattie (Mount Allison), Wolfgang Kimmerle (Stuttgart), M. Kochetov (St.John’s), D. Radford (Illinois-Chicago), S.Sehgal (Edmonton), June 3-8, 2009 St. John’s, Newfoundland, Canada.

11. Organiser of the International Workshop on “Arithmetic of group rings and related structures” joint with W. Kimmerle (Stuttgart) and G. Nebe (Aachen), RWTH Aachen University. March 21-26, 2010.
12. Organiser of the international conference on “Groups, Rings and Group Rings”, joint with S.K. Sehgal (University of Alberta, Canada) and W. Kimmerle (University of Stuttgart), July 11-15, 2011, Edmonton (Canada).
13. Organiser of the international conference on “Groups, Rings and Group Rings”, joint with A. Hermann (University of Regina, Canada), W. Kimmerle (University of Stuttgart) and Y. Li (Brock University, Canada), July 28 - August 1, 2014, St.Catharines (Canada).
14. Organiser of the international conference on ”Groups, Rings and the Yang-Baxter Equation, joint with Cedo (UAB), Okninski (Univ. Warsaw), Van den Bergh (Univ. Hasselt, FWO), June 15–24, 2017, Spa (Belgium).
15. Organiser of the international conference on ”Groups, Rings and Associated Structures, joint with Cedo (UAB), Okninski (Univ. Warsaw), Van den Bergh (Univ. Hasselt, FWO), June 09–15, 2019, Spa (Belgium).
16. Organiser (joint with Victoria Lebed (Nantes), Wolfgang Rump (Stuttgart), Leandro Vendramin (Buenos Aires)) of the workshop “Algebraic Tools for Solving the Yang–Baxter Equation”, Mini-Workshop, November 10–16, 2019

## 1.5 RESEARCH VISITS: NATIONAL AND INTERNATIONAL

year	Lecture/research	location/duration
1980	Lectures: (Warschau) Jacobson radicals of semigroup rings and K-complete semigroups, (Bialystok) Brauer groups and fields research: Radicals of graded rings	Univ. of Warsaw (Poland), 1 month
1982	Symposium on Ring Theory 1982 , Lecture: Non-commutative Krull rings research: Noncommutative Krull rings	Univ. of Warwick (England), 3 weeks
1983	Lecture: Radicals of semigroup rings research: Group rings and maximal orders	Univ. of Glasgow (Scotland), 6 weeks
1983	research: Radicals of group and semigroup rings	Univ. of Wisconsin-Madison (USA), 1 week
1983	Lecture: Asano-orders and strongly graded rings research: radicals of graded rings	Univ. of Warsaw, (Poland)
1985	Lecture: Radicals of graded rings and semigroup rings research: algebraic structure of semigroup rings	Univ. Witwatersrand (South Africa) 1 week
1985	Lecture : On radicals of semigroup rings of commutative semigroups (series of lectures) research: algebraic structure of semigroup rings	K.U. Leuven, Research Fellow 1 month
1985	Lecture: Radicals and Algebraic constructions of rings, and Arithmetical properties of commutative semigroup rings research: Semigroup rings	KU Leuven
1986	research: Algebraic structure of semigroup rings	Univ. of Glasgow (Scotland), 1 week
1986	Lecture: Chain conditions and semigroup graded rings	Limburgs Univ. Centrum
1987	Lecture: Semigroup Rings and Graded Rings (series of 3 lectures) research: Combinatorial Problems	Univ. of Osnabruck (Germany) Visiting Professor, 1 month

1988	Lecture: Jacobson Rings and Graded Rings	Limburgs Univ. Centrum and Economische Hogeschool (Diepenbeek), Belgium
	research: Prime spectra and semigroup rings	2 weeks
1988	Lecture: Prime Ideals in Graded Rings, and related matters	K.U. Leuven
	research: Prime spectra and graded rings	Visiting Professor, 1 month
1988	Lecture: Determining Units of Some Integral Group Rings	K.U. Leuven
1989	Lecture: Computing Units of Some Integral Group Rings	Univ. of Warsaw (Poland)
	research: the algebraic structure of semigroup rings	1 week
1989	Lecture: Graded Rings and Krull Orders	Univ. of Alberta (Canada)
	research: Krull orders	1 week
1989	Lecture: Semigroup algebras and direct sums of domains	K.U. Leuven
	research: Arithmetical structure of semigroup rings	2 weeks
1990	Lecture: Units of Integral Group Rings	Mount Allison Univ. (Canada)
	research: Graded rings and perfect rings	1 week
1990	Lecture: (1) On units of some integral group rings, (2) On units of loop rings, (3) The Jacobson Radical of Rings Graded by Free Groups	K.U. Leuven
	research: the arithmetical structure of semigroup rings	
1990	Lecture: Units of Some Integral Group Rings	Univ. of Heidelberg (Germany), 3 days
1991	Lecture: On Ideals of Tensor Products	Limburgs Univ. Centrum
1991	Lecture: Graded Rings and Principal Ideal Rings	K.U. Leuven
1991	Lecture: The Jacobson radical of graded rings	Univ. of Sao Paulo (Brasil), 10 days
	research: Units of group rings	
1991	Lecture: Units of integral group rings	IMPA, Rio de Janeiro, Brazil, Visiting Professor at the Univ. of Rio de Janeiro
	research: Units of group rings	3 weeks

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1992	Lecture: Nilpotent Semigroups and Semigroup Algebras research: Structure of graded rings	Mount Allison University (Canada) 1 week
1992	Lecture: Units of integral group rings	K. U. Leuven
1993	Lecture: Construction of large subgroups of the unit group of integral group rings of finite groups research: the algebraic structure of semigroup rings	University of Freiburg (Germany), 1 week
1993	Lecture: Units of Integral Group Rings research: Units of integral group rings	Univ. of Essen (Germany) 1 week
1994	Sabbatical Year, academic year 1993-1994, Lecture series on: (1) graded rings and (2) units of group rings	Murcia (Spain), 1 year, Visiting Research Fellow
1994	Principal Ideal Semigroup rings	LUC, 2 weeks
1995	research: Principal ideal semigroup rings	Univ. Warsaw (Poland), 10 days
1996	research, Units of Integral group rings	Univ. Rio de Janeiro, Brasil, 3 weeks
1996	Units of integral group rings	Univ. Sao Paulo (Brazil), 3 days
1997	research: Units of orders  Lecture: Noetherian semigroup algebras	Univ. of Colorado at Colorado Springs 10 days
1997	Research in Pairs with A. Zimmermann research: Actions of groups on cohomology	Oberwolfach 3 weeks
1997	research: Jacobson radical of graded rings Lecture (workshop): Units of Integral Group Rings	Hobart, Tasmania (Australia) 2 weeks
1998	research: Units in integral group rings Lecture: Constructing Units in Integral Group Rings	Murcia (Spain) 10 days
1998	research: Units in orders Lecture: Constructing Units in Integral Group Rings	Univ. Murcia (Spain) 1 week
1999	research: Units in group rings Lecture: Noetherian semigroup algebras	Naruto University, 4 days Naruto (Japan)

1999	research: The algebraic structure of semigroup algebras Semigroup Algebras and Maximal Orders	Warsaw (Poland) 1 week
1999	Seminar Talk Lecture: Units in Integral Group Rings a survey	KULAK Kortrijk 22 April 1999
2000	research (workshop): the unit group of orders in a quaternion algebra (joint with C. Corales, Madrid, G. Leal, Rio de Janeiro, and A. del R�ı, Murcia)	Murcia (Spain) 1 week
2000	research: Units of integral group rings Lecture: Noetherian semigroup algebras and maximal orders	Univ. Sao Paulo (Brasil) 10 dagen
2000	research: Idempotents in group rings	Univ. Rio de Janeiro, 3 days
2000	research: Bicyclics in group rings Lecture: The normalizer problem in integral group rings	Murcia (Spain), 12-20 dec
2001	research: ring theory Univ. Palermo, Italy	28-30 sep
2001	research: constructing noetherian algebras Warsaw (Poland)	23-30 june
2001	research: algebraic structure of semigroup algebras University Autonomo Barcelona Barcelona, Spain	28-30 sep. 2001
2001	research: action on cohomology rings Amiens (France)	29 jan- 3 feb.
2002	research: units in group rings Palermo (Italy)	29 jan - 3 feb.
2002	research: noetherian semigroup algebras Warsaw (Poland)	26 aug - 1 sept
2003	research: units in division rings Madrid (Spain)	17 - 25 dec.
2003	research: units in division rings Murcia (Spain)	29 jan - 2 feb.
2003	research: monoids of $I$ -type Warsaw (Poland)	2-9 june
2003	research: units of integral group rings Rio de Janeiro (Brazil)	27-31 july 5-8 aug.
2003	research: units of integral group rings	1-4 aug. Sao Paulo (Brazil)
2004	research: groups and monoids of $I$ -type	26 jan- 1 feb

2004	research: units of group rings Univ. of Murcia and Cartagena	Warsaw (Poland) 4-11 april
2004	research: units of integral group rings Murcia (Spain)	8-14 sep
2004	research: Noetherian semigroup algebras Warsaw (Poland)	8-13 nov
2005	research: Noetherian semigroup algebras Warsaw, Poland	4-11 jan
2005	research: Noetherian semigroup algebras Warsaw, Bedlewo, Poland	4-9 june
2005	research: Noetherian semigroup algebras Warsaw, Poland	20-25 june
2005	research: Noetherian semigroup algebras Warsaw, Poland	30 aug - 3 sept
2006	research: Groups and the Yang-Baxter equation CRM, Barcelona Lecture: Noetherian semigroup algebras and maximal orders	23 jan - 5 february 5
2006	research: Noetherian semigroup algebras Univ. Warsaw, Poland	3-9 april
2006	research: group rings Univ. Thessaloniki, Greece Lecture: An introduction to group rings	28 may - 1 june
2006	research: Units of integral group rings Univ. Cartagena and Murcia, Spain	6-11 june
2006	research: noetherian semigroup algebras Univ. Warsaw, Poland	23-28 oktober
2006	research: Antysymmetric elements in group rings Univ. Cartagena and Murcia, Spain	17-24 december
2007	research: Involutive Yang Baxter groups and finitely presented algebras CRM, Barcelona	22 jan. - 6 feb.
2007	research: Maximal orders and semigroup algebras Univ. Warsaw	2-6 april
2007	research: Finitely presented algebras Univ. Warsaw	27 june - 1 july
2008	research: Involutive Yang Baxter groups	03-10 february



	Univ. Murcia, Spain	
2008	research: Involutive Yang Baxter Groups Technion and University of Haifa	24 march - 1 may
2008	research: Finitely Presented Algebras Univ. Warsaw	06-10 may
2008	research: Finitely Presented Algebras Univ. Warsaw	16-20 june
2008	research: Finitely Presented Algebras Univ. Warsaw	6-8 nov.
2008	research: units of group rings University of Murcia	19-24 nov.
2009	research: The Zassenhaus Conjecture University of St. Andrews, Scotland	6-9 feb.
2009	research: Zassenhaus conjecture University Autònoma Barcelona	26 jan. - 6 feb.
2009	research: Yang-Baxter equation and groups Univ. Warsaw	9-12 marh
2010	research: Set theoretic solutions of the Yang-Baxter equation Univ. of Murcia	May 5-15 Spain
2010	research: Units of Orders Univ. of Murcia	1-4 Nov Spain
2011	research: Units of Orders Univ. of Murcia	4-7 Sept Spain
2011	research: Solutions of the Yang-Baxter equation Univ. Barcelona, UAB	7-14 Sept Spain
2011	research: Solutions of the Yang-Baxter equation Univ. Barcelona, UAB	21-23 Sept Spain
2012	research: Actions of discrete groups on products of hyperbolic spaces Univ. of Murcia	May 5-15 Spain
2012	sabbatical leave, research: units of orders Univ. Murcia	Oct 2012 - June 2013 Spain
2013	sabbatical leave, research: p power maps Western University	July - Oct 2013 Canada
2013	Technion Univ. research: involutive yang-baxter solutions	feb 4-10
2015	research visit : units of orders Univ. Murcia	5-10 jan. Spain
2015	research visit : units of orders Univ. Murcia	8-14 march Spain

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2015	research visit: solutions Yang-Baxter equation Warsaw University	7-14 june Poland
2016	research visit: solutions Yang-Baxter equation Autonoma University of Barcelona Lecture: Krull orders in nilpotent groups	31 jan.– 5 feb. Spain
2016	research visit: braces University of Warsaw	June 3–7 Poland
2017	research visit: braces Univ. Autonoma Barcelona Lecture: Free products of cyclic groups in the integral group ring of a finite group	Feb. 5-14 Spain
2018	research visit: braces Univ. Autonoma Barcelona	Feb. 5-13 Spain
2018	research visit: braces University of Warsaw Lecture: Groups, Rings, Braces and Set-theoretic So- lutions of the Yang-Baxter Equation	June 7–15 Poland
2019	research visit: braces Univ. Autonoma Barcelona	Feb. 4-14 Spain
2019	research visit: braces Shanghai New York University Lecture: Group ring rroups	April 5-17
2020	research visit: braces Univ. Autonoma Barcelona Lecture: Associative structures associated to set- theoretic solutions of the Yang–Baxter equation	Feb. 4-12 Spain

**1.6 INVITED AS VISITING PROFESSOR/RESEARCHER**

<b>year</b>	<b>position</b>	<b>location/duration</b>
1985	Research Fellow	K.U.Leuven, Belgium, 1 month
1987	Visiting Professor	Univ. of Osnabruck (Germany), 1 month
1988	Visiting researcher	K.U. Leuven, Belgium, 1 month
1990	Visiting researcher	Univ. Sao Paulo (Brasil), 3 weeks
1991	Visiting Professor	IMPA, Rio de Janeiro, Brasil, 3 weeks
1994	Visiting Research Professor	Univ. of Murcia (Spain), 1 year
2002	Visiting Research Professor	Mathematical Research Centre Barcelona april-july
2007	Visiting Research Professor	Mathematical Research Centre Barcelona 22 jan. - 6 feb.
2012	Visiting Research Professor	Univ. of Murcia (Spain), 9 months
2013	Visiting Research Professor	Western University (Canada), 3 months

**1.7 ERASMUS TEACHING**

- |      |   |                 |
|------|---|-----------------|
| 2006 | Course "Introduction to Group Rings"<br>Univ. Thessaloniki, Greece              | 28 may - 1 june |
| 2009 | Course "Group Rings and The Isomorphism Problem"<br>University of Murcia, Spain | 5-15 May        |

## 1.8 SCIENTIFIC PRIZES

- President's Award Council for Scientific and Industrial Research, South Africa, 3 year award
- University Research Professor, Memorial University of Newfoundland, 5 year award
- Sabbatical Leave from Memorial University of Newfoundland to University of Murcia (Spain), 1993-1994,
- Sabbatical Leave from VUB to Univ. of Murcia (Spain) and University of Western Ontario (Canada), 2012-2013.

## 1.9 MEMBERSHIP IN LEARNED SOCIETIES

1. American Mathematical Society
2. European Mathematical Society
3. Belgian Mathematical Society

## 1.10 ACTIVITIES AS A PEER REVIEWER

- Selection committee for the E.W.R. Steacie Memorial Fellowship program of the Natural Sciences and Engineering Research Council of Canada, 2010
- National Sciences and Engineering Research Council (NSERC) Grant Selection Committee, GSC 336 (Mathematics), 1994-1997.
- Referee for NSERC-research applications
- Referee for the Italian Ministry for Education University and Research (MIUR)
- Referee for research evaluations for INTAS- the international association for the promotion of co-operation with scientists from the new independent states (NIS) of the former Soviet Union
- Referee for several international mathematical journals

- Reviewer for the American Mathematical Society and for Zentralblatt
- Expert FWO, W&T1: Wiskundige Wetenschappen, 2014 – 2020.

### 1.11 OBTAINED RESEARCH FUNDING

- 1986, Council for Scientific and Industrial Research, South Africa, President's Award, R 19000 (about BEF 780000 per year), three year grant.
- 1987-88, President's National Sciences and Engineering Research Council (NSERC)-general grant, 11000 C\$ each year.
- 1988-91, National Sciences and Engineering Research Council (NSERC), C\$12000 each year.
- 1991-94, NSERC, C\$14000 each year.
- 1993-94, NSERC Equipment Award (with E.G. Goodaire and J. Yu), C\$ 15000.
- 1994-1998, NSERC, C\$ 17000 each year.
- 1995-1996, NSERC Computing Support (with H. Brunner, A. Chandna, R. Charron, A. Foster and H. Gaskill), C\$31000.
- 1996-1998, University Research Professor Grant (Memorial University of Newfoundland), C\$3000 during 1996 and C\$4,000 each year during the period 1997-2001.
- 1997-98, Faculty of Science Grant (Memorial University of Newfoundland), C\$ 13000.
- 1997-1998, Dean of Science Internal Award (Memorial University of Newfoundland), C\$8000 each year during the period 1997-2002.
- 1998-2001, OZR (research council VUB), BEF 1000000 (starting funds).
- 1998-2001, FWO (fund for scientific research, Flanders), Research Grant BEF 300,000.
- 2000-2001, OZR, BEF 150,000.
- 2000-2003, FWO, bilateral agreement with the National Fund of Bulgaria (project with Gateva-Ivanova), expenses for visits, Euro 670.
- 2000-2001, Tournesol (Flemish community - France), BEF 65000.
- 2001-2002, OZR, Research Grant BEF 210000.
- 2001-2003, OZR (FWO-aspirant Doods Ann), Research Grant BEF 100000.
- 2001-2003, FWO, Research grant BEF 200000.
- 2002-2003, OZR, Research Grant Euro 7000.
- 2003-2005, FWO, Research Grant Euro 6000.
- 2003-2004, OZR, Research Grant Euro 7000.

- 2002-2005, Bilateral and Scientific and Technological Cooperation, BWS, VUB-KULAK-WARSAW, Euro 88331,28 (Euro 66248,46 voor VUB, en Euro 22082,82 voor copromotor in KULAK).
- 2002, Expert Visit, March 1 - March 17, 2002. NATO: Euro 1983,15.
- 2000-2004, Aspirant FWO Ann Dooms, 100% FTE.
- 2004-2007, Post-doc FWO Ann Dooms, 100% FTE.
- 2005-2008, Ph.D. research position I. Goffa, IWT (Fund for scientific and industrial research), 100% FTE.
- 2005-2008, Research grant IWT, I. Goffa, Euro 7436,88. - 7436,88 EURO
- 2006, Postdoctoral Position for O. Konovalov (Ukraine), Franqui Fund, ADSI107, 01.012006-31-12.2006, Euro 53248,27.
- 2006-2009, Bilateral Scientific and technological Cooperation (VUB-Warsaw), BWS, Euro 49000.
- 2006-2007, FWO, Research Grant Euro 7000.
- 2009-2010, FWO, Research Grant, Euro 10027.
- 2009-2010, OZR, Research Grant Euro 8000.
- 2010-2011, OZR, Research Grant Euro 5532.
- 2010, Research Professor grant for Prof. A. Del Rio, IOWB, (Instituut ter bevordering van het Wetenschappelijk Onderzoek en de Innovatie van Brussel), Euro 33160
- 2010-2014, Aspirant FWO Ann Kiefer, 100% FTE.
- 2011-2012, OZR, Research Grant Euro 5700
- 2011-2015, Aspirant FWO Inneke Van Gelder, 100% FTE.
- 2012-2016, FWO research project; Groups, Group Rings and the Yang-Baxter equation, including a 100% FTE Post-doctoral Fellow, Euro 280000.
- 2012-2013, Long Stay Abroad, FWO, Euro 19470.
- 2012, Research Funding VUB, Euro 12500.
- 2012, Pegasus Long, Post-Doctoral Fellowship A. Gordienko, 2012-2015.
- 2013-2016, Post-doctoral Fellow FWO A. Bachle, 100% FTE
- 2013, Vlac Fellowship, Prof. J. Okninski, 6 months, oct. 2013-april 2014



- 2013, Research Funding VUB, Basisfinanciering.
- 2014, Research Funding VUB, Basisfinanciering.
- 2015-2019, Aspirant FWO Doryan Temmerman, 100% FTE.
- 2015-2018, Post-doctoral Fellow FWO Alexey Gordienko, 100% FTE.
- 2015, Research Funding VUB, Basisfinanciering.
- 2014-2017, Post-doctoral Fellow FWO A. Kiefer, 100% FTE (with an extension up to 2019)
- 2014-2018, Aspirant FWO G. Janssens, 100% FTE.
- 2016, Research Funding VUB, Basisfinanciering.
- 2016-2019, Post-doctoral Fellow FWO A. Bächle, 100% FTE.
- 2016-2019, Post-doctoral Fellow FWO M. Caicedo, 100% FTE.
- 2015-2019, Aspirant FWO Arne Van Antwerpen, 100% FTE.
- 2017, Research Funding VUB, Basisfinanciering.
- 2017-2020, FWO research project; Group Ring Groups, Braces and Set-theoretic Solutions of the Yang-Baxter Equation, including a 100% FTE Post-doctoral Fellow, Euro 200000 (post-doctoral fellow L. Kubat Jan. 2018 - December 2020).
- 2017-2020, Post-doctoral Fellow FWO L. Margolis.
- 2017-2020, Incoming Pegasus FWO Spela Spenko, 2017-2020, 100% FTE.
- 2017-2020, incoming Pegasus FWO D. Bachiller, 100% FTE; Bachiller did not accept the offer.
- 2018, Research Funding VUB, Basisfinanciering.
- 2018-2021, Post-doctoral Fellow FWO G. Janssens, 100% FTE.
- 2018-2022, Aspirant FWO C. Verwimp, 100% FTE.
- 2019, Research Funding VUB, Basisfinanciering.
- 2020, Research Funding VUB, Basisfinanciering.
- 2020-2023, Post-doctoral Fellow FWO A. Van Antwerpen.

**1.12 EXAMINER**

1. External Examiner Masters degree of M. L. Marrow (Univ. Witwatersrand), R. N. Prince (Univ. Cape Town) and P. G. Slattery (Univ. Witwatersrand).
2. External examiner doctoral thesis H. Mommaerts, K.U. Leuven.
3. External examiner doctoral thesis R. Antoine Rialobos, University of Barcelona, 2001.
4. External examiner doctoral thesis Marinella Sciortina, University of Palermo, 2002.
5. External examiner doctoral thesis Vincenzo Nardoza, University of Palermo, 2002, foreign member.
6. External examiner doctoral thesis Aurora Alejandro Olivieri Palmas, 2003, foreign member.
7. Examiner doctoral thesis Wendy Lowen, VUB, Deformation theory and Hochschild cohomology of abelian categories promoter, 2005.
8. Examiner doctoral thesis T. Van der Linden, Homology and homotopy in semi-abelian categories.
9. Examiner doctoral thesis Joost Verduyn, Galois theory and symmetric functors for general module categories and Corings, 2007
10. Examiner doctoral thesis T. Everaert, VUB, 2006.
11. Examiner doctoral thesis B. Femic (at Univ. Almeria, Spain), 2008, Univ. Almeria and VUB
12. External Examiner doctoral thesis C.R. Höfert, 2008, Univ. of Stuttgart.
13. Examiner doctoral thesis K. Janssen, VUB, Coring techniques and monomial categories applied to Hopf algebras and their generalizations.
14. External Examiner doctoral thesis M. Elena Rodriguez Jorge, University Autònoma Barcelona, 2011.
15. External Examiner doctoral thesis Nir Ben-David, Technion, Israel, 2013.
16. External Examiner doctoral thesis Nikolaas Verhulst, Universiteit Antwerpen, Belgium, 2016.
17. External Examiner Master Thesis Anneleen Van de Velde, Universiteit Antwerpen, Belgium, 2016.

### 1.13 VISITORS RECEIVED SINCE 1998

1. A. del Rio, University of Murcia (Spain), 2-14 Nov. 1998,  
Lectures: (1) Structure theorems of unit groups, (2) Rings with local units.  
research: structure theorems of the unit group of integral group rings.
2. A. Zimmermann, University of Amiens (France), 16-18 Nov. 1998.  
research: actions of the symmetric group on group cohomology.
3. A. Giambruno, University of Palermo (Italy), 14-21 Feb. 1999.  
research: constructing units in integral group rings.  
Lecture: Codimension growth of PI algebras.
4. A. del Rio, University of Murcia (Spain ), 29 march - 11 April, 1999.  
lecture: constructing free groups in unit groups of integral group rings.
5. Q. Wang, Memorial University of Newfoundland, St.John's (Canada), 22 February - 31 March, 1999.  
research: prime ideals in semigroup algebras and unique factorisation rings.
6. M. Beatie, Mount Allison University, Sackville (Canada), 12-14 April 1999.
7. J. Okniński, University of Warsaw (Poland), 25 August - 15 September 1999.  
research: the algebraic structure of noetherian semigroup algebras
8. S.O. Juriaans, University of Sao Paulo (Brasil), 16-31 October, 1999.  
Lecture: Finite conjugacy in Algebras and Orders.  
research: the normalizer problem for integral group rings.
9. W. Kimmerle, University of Stuttgart (Germany), 9-11 December, 1999,  
Lecture: Automorphisms of groups and group rings.
10. Guilherme Leal, University of Rio de Janeiro (Brasil), 10-23 January 2000,  
Lecture: Free groups in a rational quaternion algebra,  
research: Units in quaternion orders.
11. Jan Okniński, University of Warsaw (Poland), 27 April - 16 May 2000,  
research: the algebraic structure of noetherian semigroup algebras.
12. T. Gateva-Ivanova, Bulagarian Academy and American University of Bulgaria (Bulgaria), 28 April - 24 may 2000.  
research: Algebras of skew polynomial type.
13. C. Polcino Milies, University of Sao Paulo (Brasil), 24 June - 7 July 2000,  
Lecture: The normalizer conjecture for group rings of Frobenius groups,  
research: The structure of partial group rings.

14. T. Gateva-Ivanova, Bulagarian Academy and American University of Bulgaria (Bulgaria), 12-22 October 2000,  
Lecture: Set theoretic solutions of the Yang Baxter equation and semigroups of skew polynomial type,  
research: Quadratic algebras of skew type and the underlying semigroups.
15. A. Zimmermann, University of Amiens (France), 8-10 November 2000.  
Lectures: Cohomology of groups  
research: Actions of groups in cohomology rings.
16. G. Leal, University of Rio de Janeiro (Brasil), 20-25 November 2000.  
Lectures: Central idempotents in rational group algebras of nilpotent groups,  
research: Idempotents in group rings.
17. A. Zimmermann, University of Amiens (Frankrijk), 6-8 december 2000,  
Lezingen: Cohomology of groups.  
research: Actions of groups on cohomology rings.
18. J. Okniński, Univ. Warsaw (Poland), April 4-10, 2001, lecture: In search for noetherian algebras.  
research: noetherian semigroup algebras.
19. T. Gateva-Ivanova, Academy of Bulgaria, Sofia, July 4-13, 2001  
research: noetherian algebras
20. D. Riley, Univ. of Western Ontario, Canada, August 18-26 2001  
lecture: Positively  $n$ -Engel groups and rings,  
research: identities and unit groups
21. S. Orlando Juriaans, October 11-30, 2001.
22. A. del Rio, January 15-24, 2002,  
lecture: Bicyclic units in integral group rings.
23. C. Corrales, January 15-24, 2002,  
lecture: How Fermat proved his last theorem.
24. J. Okninski, March 1 - March 18, 2002, Lecture: Subspace semigroups.
25. Z. Marciniak (Warsaw University), 8 - 21 september, 2002.
26. J. Krempa (Warsaw University), 1 - 19 october, 2002, Lectures: Units and quaternion algebras, and, Dimensions in groups.
27. J. Okninski (Warsaw Univ.), 28 nov. - 6 dec., 2002, Lecture: Irreducible linear semigroups of matrices with eigenvalue 1.

28. S. Orlando Juriaans (Univ. Sao Paulo), 22 feb. - 21 march, 2003, Lecture: Units and automorphisms of integral group rings.
29. Edmund Puczyłowski (Univ. of Warsaw), 26 march - 1 april, 2003, Lecture: Radicals of rings.
30. Jan Okninski (Univ. of Warsaw), 24 april - 3 mei, 2003, Lecture (2): Linear groups and semigroups and representation theory.
31. A. del Rio (Univ. of Murcia), 8-17 dec. 2003
32. J. Okninski (Univ. of Warsaw), 24 aug - 9 sep, 2003
33. E. Puczyłowski (Univ. of Warsaw), 8-15 sept. 2003
34. A. Salwa (Univ. of Warsaw), 31 aug - 6 sep 2003
35. A. Strojnowski (Univ. of Warsaw), 31 aug - 6 sep 2003
36. J. Krempa (Univ. of Warsaw), 31 aug - 6 sep 2003
37. Z. Marciniak (Univ. of Warsaw), 31 aug - 6 sep 2003
38. J. Matczuk (Univ. of Warsaw), 31 aug - 6 sep 2003
39. J. Okninski (Univ. of Warsaw), 2-9 June 2004
40. M. Ruiz (Univ. of Cartagena), October 2003 - March 2004
41. S.K. Sehgal (Univ. Edmonton, Canada), 25-28 March 2004
42. Z. Marciniak (Univ. Warsaw), 25-29 March 2004
43. D. Riley (Western Ontario, Canada), 31 March - 29 April 2004
44. I. Passi (Harish-Chandra Research Institute), 3-15 May 2005
45. Z. Marciniak (Univ. of Warsaw), 20-23 aug 2004
46. J. Matczuk (Univ. of Warsaw), 20-23 aug 2004
47. J. Okninski (Univ. of Warsaw), 20-23 aug 2004
48. J. Krempa (Univ. of Warsaw), 20-23 aug 2004
49. A. Salwa (Univ. of Warsaw), 20-23 aug 2004
50. A. Strojnowski (Univ. of Warsaw), 20-23 aug 2004
51. J. Jaszunska (Univ. of Warsaw), 20-23 aug 2004

52. P. Grzeszczuk (Univ. of Bialystok), 20-23 aug 2004
53. C. Baginski (Univ. of Bialystok), 20-23 aug 2004
54. M. Ruiz (Univ. of Cartagena), 16 -23 aug 2004
55. O. Cristo (Univ. Sao Paulo), 23-30 october 2004
56. M. Ruiz (Univ. Sao Paulo), 23-30 october 2004
57. P. Veloso (Univ. Rio de Janeiro), 1 feb 2005 - 1 feb 2006
58. A. del Rio (Univ. of Murcia), 20-27 march, 2005
59. M. Ruiz (Univ. of Cartagena), 20-27 march, 2005
60. J. Okninski (Univ. Warsaw), 14-20 march 2005
61. J. Goncalves (Univ. Sao Paulo), 12-15 april 2005
62. J. Okninski (Univ. Warsaw), 12-17 september 2005
63. Research Visitor to ALGB: GAP, - Visitor S. Linton, University of St. Andrews, (Scotland) 05.11.2006-11.11.2006
64. Research Visitor to ALGB: GAP, - Visitor F. Luebeck, University of Aachen, Aachen (Germany) 23.10.2006-25.10.2006
65. Research Visitor to ALGB: torsion units in group rings, - Visitor V. Bovdi, University of Debrecen, Debrecen (Hungary) 06.08.2006-14.08.2006
66. Research Visitor to ALGB: GAP, - Visitor P. Soules, University of Athens, Athens (Greece) 17.06.2006-23.06.2006
67. Research Visitor to ALGB: Wedderburn decomposition of group algebras, - Visitor G. Olteanu, University of Murcia, Murcia (Spain) 03.05.2006-12.05.2006
68. Research Visitor to ALGB: torsion units in group rings, - Visitor V. Bovdi, University of Debrecen, Debrecen (ungary) 17.03.2006-24.03.2006
69. Research Visitor to ALGB: group rings and Frobenius type of maps, - Visitor D. Riley, University of Western Ontario, London (Canada) 09.07.2006-17.07.2006
70. Research Visitor to ALGB: noetherian semigroup algebras, - Visitor J. Okninski, University of Warsaw, Warsaw (PL) 12.03.2006-19.03.2006
71. Research Visitor to ALGB: units of group rings and anty-symmetric elements, - Visitor M. Ruiz, University of Cartagena, Cartagena (Spain) 19.02.2006-24.02.2006

72. Research Visitor to ALGB: noetherian semigroup algebras, - Visitor J. Okninski, University of Warsaw (PL) 3.12.2006-9.12.2006.
73. Research Visitor to ALGB: Farey symbols, - Visitor H. Verrill, Louisiana State University 30-31 oct., 2006.
74. Research Visitor to ALGB: units of group rings. M. Ruiz, University of Cartagena (Spanje) 16-21 April 2007.
75. Research Visitor to ALGB: units of group rings. O. Cristo, University of Lavras (Brazil) 16-21 April 2007.
76. Research Visitor to ALGB, Visitor F. Cedo, University Autonoma Barcelona, 7-15 sept., 2007.
77. Research Visitor to ALGB, Visitor A. del Rio, University of Murcia, 7-15 sept., 2007.
78. Research Visitor to ALGB, Visitor D. Riley, Univ. of Western Ontario (Canada), 29 aug.- 2 sept., 2007.
79. Research Visitor to ALGB, Visitor J.Krempa, Univ. of Warsaw, 1-2 sept., 2007.
80. Research Visitor to ALGB, Visitor A. Salwa, Univ. of Warsaw, 1-2 sept., 2007.
81. Research Visitor to ALGB, Visitor A. Strojnowski, Univ. of Warsaw, 1-2 sept., 2007.
82. Research Visitor to ALGB, Visitor A. Matczuk, Univ. of Warsaw, 1-2 sept., 2007.
83. Research Visitor to ALGB, Visitor J. Okninski, Univ. of Warsaw, 1-2 sept., 2007.
84. Research Visitor to ALGB, Visitor K. Jachim, Univ. of Warsaw, 1-2 sept., 2007.
85. Research Visitor to ALGB, Visitor R. Mazurek, Univ. of Bialystok (Poland), 1-2 sept., 2007.
86. Research Visitor to ALGB (scientific collaborator), G. Olteanu, Univ. Murcia, May 1 - July 31, 2007.
87. S.O. Juriaans (Sao Paolo), 21-25 nov and 1-7 dec, 2007.
88. Research Visitor to ALGB, Visitor J. Okninski, Univ. of Warsaw, 22-26 april, 2008.
89. D. Jordan, Univ. of Sheffield, 24-26 april 2008.
90. Research Visitor to ALGB, Visitor J. Okninski, Univ. of Warsaw, 15-19 oct., 2008.
91. Research Visitor to ALGB, Visitor J. Okninski, Univ. of Warsaw, 10-13 dec., 2008.
92. Research Visitor to ALGB, Visitor G. Olteanu, Feb 2009 - Jan 2010.

93. Research Visitor to ALGB, Visitor A. del Rio, Univ. of Murcia (Spain), 6-8 april 2009.
94. Research Visitor to ALGB, Visitor E. Puczykowski, 21-26 april 2009.
95. Research Visitor to ALGB, Visitor J. Okninski, 16-20 june 2009.
96. Research Visitor to ALGB, Visitor J. Krempa, 23-28 june 2009.
97. Research Visitor to ALGB, Visitor A. del Rio, Univ. of Murcia (Spain), 21-26 september 2009.
98. Research Visitor to ALGB, Visitor F. Cedo, Univ. Autonoma Barcelona (Spain), 25 jan.-3 feb. 2010.
99. Research Visitor to ALGB, Visitor A. del Río, Univ. Murcia (Spain), 1 jan - 31 july 2010.
100. Research Visitor to ALGB, Visitor Mauricio Caicedo, Univ. Murcia (Spain) 17-29 may 2010.
101. Research Visitor to ALGB, Visitor M. Ruiz, Univ. Cartagena (Spain), 6-10 june 2010.
102. Research Visitor (Sabbatical), S.O. Juriaans, Univ. Sao Paulo (Brazil), 15-08-2010 to 31-08-2011.
103. Research Visitor to ALGB, Visitor J. Okninski, Univ. Warsaw, 27 feb. - 5 march, 2011.
104. Research Visitor, Allen Herman, University of Regina (Canada), June 16-19, 2011.
105. Research Visitor to ALGB, Visitor A. del Río, Univ. Murcia (Spain), 21-25 june, 2011.
106. Research Visitor to ALGB, Visitor J. Goncalves, Univ. Sao Paulo (Brazil), 20 Sept - 2 Oct, 2011.
107. Research Visitor to ALGB, U. Meir, Techion (Israel) and Max Planck (Germany), Dec 22-24, 2011.
108. Research Visitor to ALGB, A. del Rio, Univ. Murcia (Spain), jan 8-13, 2012.
109. Research Visitor to ALGB, F. Eisele, Univ. Aachen, Jan, 2012.
110. Research Visitor to ALGB, J. Okninski (Warsaw, Poland), 30 jan. - 10 feb, 2012.
111. Research Visitor to ALGB, F. Cedo (Barcelona, Spain), 30 jan. - 10 feb, 2012.
112. Research Visitor to ALGB, A. Bachle (Stuttgart, Germany), 8-9 March, 2012.
113. Research Visitor to ALGB, D. Riley (UWO, London, Canada), 10-30 April, 2012.



114. Research Visitor to ALGB, A. del Rio (Murcia, Spain), 18-22 June, 2012.
115. Research Visitor to ALGB, J. Okninski (University of Warsaw), 01 Oct. 2013 - 31 March 2014.
116. Research Visitor to ALGB, Arkadiusz Mecel (University of Warsaw), 11–18 Nov. 2013.
117. Research Visitor to ALGB, Arkadiusz Mecel (University of Warsaw), 19–27 Jan. 2014.
118. Research Visitor to ALGB, F. Cedo (UAB, Barcelona), 29 Jan - 07 Feb., 2014.
119. Research Visitor to ALGB, A. Leroy (Universite d'Artois), 4 Feb., 2014.
120. Research Visitor to ALGB, D. Riley (UW, London, Canada), 1–27 April, 2014.
121. Research Visitor to ALGB, F. Cedo, (UAB, Spain), 30 okt - 1 nov, 2014.
122. Research Visitor to ALGB, J. Okninski (University of Warsaw), 30 okt - 1 nov, 2014
123. Research Visitor to ALGB, A. del Rio (Murcia, Spain), 23–27 February, 2015.
124. Research Visitor to ALGB, A. del Rio (Murcia, Spain), 30 nov. - 6 dec, 2015.
125. Research Visitor to ALGB, A. del Rio (Murcia, Spain), 22-28 march, 2015.
126. Research Visitor to ALGB, D. Riley (Western University, London, Canada), 18-25 july, 2015
127. Research Visitor to ALGB, David Bachiller, ph.d. student, promotor Cedo UAB, co-promotor European part of Ph.D Eric Jespers, sept 12 - dec 12, 2014.
128. Research Visitor to ALGB, J. Okninski (University of Warsaw), 2–7 May, 2016.
129. Research Visitor to ALGB, F. Cedó (UAB), 4–9 September, 2016.
130. Research Visitor to ALGB, J. Okninski (Univ. Warsaw), 4–9 September, 2016.
131. Research Visitor to ALGB, L. Margolis (Univ. Murcia), 30 Okt. – 3 November, 2016.
132. Research Visitor to ALGB, L. Margolis (Univ. Murcia), 6-10 November, 2016.
133. Research Visitor to ALGB, W. Kimmerle (Univ. Stuttgart), 28 November – 2 December, 2016.
134. Research Visitor to ALGB, Colin Ingalls, University of New-Brunswick (Canada), 1 sept. 2016 - 31 august 2017, sabbatical stay.
135. Research Visitor to ALGB, L. Margolis (Univ. Murcia), 9–15 January, 2017.
136. Research Visitor to ALGB, M. Zaicev (Univ. Moscow), 18–21 May, 2017.

137. Research Visitor to ALGB, D. Riley (Univ. Western Ontario), 10–18 June, 2017.
138. Research Visitor to ALGB, A. del Rio (Univ. Murcia), 18-22 December, 2017.
139. Research Visitor to ALGB, A. del Rio (Univ. Murcia), 18-23 March, 2018.
140. Research Visitor to ALGB, A. del Rio (Univ. Murcia), 23-27 April, 2018.
141. Research Visitor to ALGB, J. Okninski (Univ. Warsaw), 1-5 May, 2018.
142. Research Visitor to ALGB, F. Cedo (UAB), 1-5 May, 2018.
143. Research Visitor to ALGB, W. Kimmerle (Univ. Stuttgart), 17-21 September, 2018.
144. Research Visitor to ALGB, L. Vendramin (Univ. Buenos Aires), 4-18 October , 2018.
145. Research Visitor to ALGB, A. del Rio (Univ. Murcia), 5-10 May , 2019.
146. Research Visitor to ALGB, W. Kimmerle (Univ. Stuttgart), 13-17 May, 2019.
147. Research Visitor to ALGB, L. Vendramin (Univ. Buenos Aires), 8-14 March, 2020.
148. Wei Liang Sun, National Taiwan Normal University, 1 Oct. 2019 ? 31 March 2020
149. Since 2017 we have weekly visitors who present their latest results in the algebra seminar.

## 2 TEACHING EXPERIENCE

- K.U. Leuven (Belgium), tutorials for the courses: algebra and analysis (mathematics and physics students), statistics and differential equations (service courses)
- University of Stellenbosch (South Africa), courses: calculus, algebra, real analysis, ring theory (graduate),
- University of Cape Town (South Africa), courses: calculus, linear algebra and geometry, algebra, ring theory (undergraduate and graduate), graded rings (graduate), Krull rings (graduate)
- De-Nayer (Belgium), tutorials for the courses: analysis, linear algebra, differential equations, numerical analysis
- Memorial University of Newfoundland (Canada), courses: Linear Algebra 2050 and 2051, Calculus 1000, 1010 and 1011, Differential Calculus 1081, Abstract algebra 3320, Rings and Modules 6032 (graduate), ring theory 6321 (graduate), group theory 4321, rings and modules 4320, introduction to number theory 3370, discrete mathematics 2320
- Vrije Universiteit Brussel, courses (yearly 5-7 courses): Differential and Integral Calculus, with some numerical analysis, Algebra I, Algebra II, Ring and Module theory, Introduction to Group Theory, Advanced Algebra (graduate), Functional Analysis, Non-commutative Algebra (graduate), Representation Theory (graduate), Associative Algebra (graduate), Capita Selecta in de Algebra, Galois Theory, Linear Algebra (service)
- Master thesis supervision (past 5 years)
  1. 2006, Dieter Bardijn
  2. 2009, Wong Hil Yeung
  3. 2010, Inneke Van Gelder
  4. 2010, Maya Van Campenhout
  5. 2010, Adriaan Barri (co-promotor)
  6. 2012, Shaun Bundervoet
  7. 2012, G. Janssens
  8. 2015, C. Mazijn
  9. 2015, D. Temmerman
  10. 2016 A. Van Antwerpen
  11. 2018 D. Janssens
  12. 2018 B. Verbeken

13. 2018 C. Verwimp
14. 2020 J. Bosmans
- Final Project supervision, Bachelor 3 (past 4 years)
  1. 2007, Marjon Blondeel
  2. 2007, Tina Vevloet
  3. 2008, Maya Van Campenhout
  4. 2008, Inneke Van Gelder
  5. 2008, Sandra Van Vooren
  6. 2009, Shaun Bundervoet
  7. 2009, Dorien Thumas
  8. 2009, Jeroen Mathijssens
  9. 2010, Geoffrey Janssens
  10. 2011, Joni D'Hoe
  11. 2011, Theo Raedschelders
  12. 2011, Timmy Fieremans
  13. 2011, Jeroen Matthijssens
  14. 2013, Carmen Mazijn,
  15. 2015, Charlotte Verwimp
  16. 2016, Maurits van Rozendaal
  17. 2017, Estelle Osman
  18. 2018, Jente Bosmans

### 3 ADMINISTRATIVE SERVICE

#### 3.1 Period 1987-1998, Memorial University of Newfoundland

- 1988-90, Colloquium Committee, Department of Mathematics and Statistics, Chair
- 1989-93, Graduate Studies Committee, Department of Mathematics and Statistics, Chair
- 1990-91, Promotion and Tenure Committee, Department of Mathematics and Statistics
- 1992-95, Board of the Academic Council of the School of Graduate Studies
- 1992-93, Rules, Regulations, and Courses Committee of the Academic Council of the School of Graduate Studies
- 1993-1997, Graduate Studies Committee, Department of Mathematics and Statistics
- 1995, Five year planning committee 1996-1997, University Committee - National Sciences and Engineering Research Council (NSERC), Scholarships and Fellowships
- 1997, Academic Council of the School of Graduate Studies
- 1997-98, Promotion and Tenure Committee, Department of Mathematics and Statistics
- 1997-1998, **Deputy Head**, Department of Mathematics and Statistics
- 1997-1998, Departmental Review Committee, Department of Mathematics and Statistics
- 1997-1998, Chair, Graduate Studies Committee, Department of Mathematics and Statistics
- 1997-1998, University Committee - NSERC Scholarships and Fellowships
- 1998, University Committee on International Relations, Department of Mathematics and Statistics

#### 3.2 Period 1998-..., Vrije Universiteit Brussel

- Committee International Relations, Department of Mathematics, 1998-...
- Departmental Erasmus coordinator (European exchange program), 2000-...
- Faculty Committee "Restructuring Mathematics, Sciences and Engineering", 2004-2006

- Departmental Evaluation Committee Bachelors and Master programs, 2004
- Committee joint Master program Vrije Universiteit Brussel - University of Antwerp,
- **Chair**, Department of Mathematics, March 2004- May 2008
- Board of the Faculty of Sciences and Bio-Engineering 2004-2008, 2010-...
- Faculty Committee reform Bachelor education, 2006-2008
- Departmental Accreditation Committee, 2006
- Departmental Research Evaluation Committee, 2006
- Faculty Committee reform Mathematics Education in Science and Bio-Engineering, 2006-2008
- Research committee Faculty of Sciences and Bio-Engineering 2004-...
- University Alliance Committee Vrije Universiteit Brussel - University of Gent, 2006
- Departmental Search Committee Analysis, 2000.
- Departmental Search Committee Statistics, 2005
- Departmental Search Committee Statistics, 2008
- Coordinator Master Program Mathematics, 2007-2015
- Joint Master Committee Vrije Universiteit Brussel - University of Antwerp, 2005-2014
- Departmental Rationalizing Committee, 2009
- Committee Resources and Personnel, Faculty Committee (Sciences and Bio-Engineering), 2010-2015
- Committee Resources and Personnel, University Committee, chair, 2010-...
- University Committee Resources and Personnel, 2010-2015.
- Research coordinator Department of Mathematics, 2011-2015.
- Departmental Coordinator Evaluation Bachelor-Master program 2013
- Departmental chair follow up committee Bachelor-Master program, 2014-2015
- Dean of Sciences and Bio-Engineering Sciences, 2015-2019
- Member of the University Council (Universiteitsraad), 2015-2019
- Member of the Academic Council (Academische Raad), 2015-2019

- Member of the council of the Deans (Raad van Decanen), 2015-2019
- Chair of the Evaluation and Promotion Committee of the Faculty of Sciences and Bioengineering Sciences, 2015-2019
- Chair of the Faculty Council (Faculteitsraad) of the Faculty of Sciences and Bioengineering Sciences, 2015-2019
- Chair of the Board of Faculty (Faculteitsbestuur) Faculty of Sciences and Bioengineering Sciences, 2015-2019
- Chair of the Board (Faculteitsbureau) of the the Faculty of Sciences and Bioengineering Sciences, 2015-2019
- Visit to Shenyang University of Chemical Technology (SYUCT), making up an agreement (research and education) for the Chemistry Department, represented the faculty as a Dean, 19/03/2016 - 26/03/2016.
- Visit to CERN with a VUB and UA delegation, 10/3/2017; represented the faculty as Dean.