

# Publications since 2000

Wolfgang Rump

1. Two-Point Differentiation for General Orders, *Journal of Pure and Applied Algebra* 153 (2000), 171-190.
2. Representation theory of two-dimensional Brauer graph rings, *Colloquium Mathematicum* 86 (2000), 239-251.
3. Derived orders and Auslander-Reiten quivers, *An. Şt. Univ. Ovidius Constanța* 8 (2000), 125-142.
4. Non-Commutative Cohen-Macaulay Rings, *J. Algebra* 236 (2001), 522-548.
5. \*-Modules, Tilting, and Almost Abelian Categories, *Communications in Algebra* 29 (2001), 3293-3325.
6. Invertible Ideals and Non-Commutative Arithmetics, *Comm. in Algebra* 29 (2001), 5673-5686.
7. Differentiation and Splitting for Orders, *Colloquium Mathematicum* 89 (2001), 7-42.
8. Non-commutative regular rings, *J. Algebra* 243 (2001), 385-408.
9. Invertible Ideals and Non-commutative Generalizations of Regular Rings, in: K. W. Roggenkamp and M. Ştefănescu (eds.) *Algebra - Representation theory. Proc. NATO Advanced Study Institute, Constantza, Romania, Aug. 2-12, 2000.* Dordrecht: Kluwer Academic Publishers. *NATO Science Ser. II, Math. Phys. Chem.* 28 (2001), 351-378.
10. Almost Abelian Categories, *Cahiers de topologie et de géométrie différentielle catégoriques* 42 (2001), 163-225.

11. Lattice-finite rings and their Auslander orders, Proc. 34th Symposium on Ring Theory and Representation Theory, Maebashi, Japan 2001, 89-99.
12. Ladder functors with an application to representation-finite artinian rings, An. Șt. Univ. Ovidius Constanța 9 (2001), 107-124.
13. Regular overorders of lattice-finite rings and the Krull-Schmidt property, J. Pure Appl. Algebra 179 (2003), 169-173.
14. Non-commuting numbers and functions, Cubo Math. J. 5, nr. 3 (2003), 97-109
15. A class of Auslander-regular Macaulay rings, Commun. in Algebra 31, Nr. 12 (2003), 6161-6174
16. Categories of lattices, and their global structure in terms of almost split sequences, Algebra and Discrete Mathematics 3 (2004), 87-111
17. Differentiation for orders and artinian rings, Algebr. Represent. Theory 7 (2004), 395-417
18. Triads, J. Algebra 280 (2004), 435-462
19. L-functors and almost split sequences, Commun. Algebra 33 (2005), 73-95
20. A decomposition theorem for square-free unitary solutions of the quantum Yang-Baxter equation, Adv. Math. 193 (2005), 40-55
21. Large indecomposables over representation-infinite orders and algebras, Arch. Math. 84, No. 1 (2005), 11-21
22. Large lattices over orders, Proc. London Math. Soc. 91 (2005), 105-128
23. The triangulated structure of ladder functors, in: Corrado De Concini et al. (eds.), Noncommutative Algebra and Geometry, Chapman and Hall/CRC, Lecture Notes in Pure Appl. Math. 243 (2005), 184-202

24. Lattice-finite rings, *Algebras and Representation Theory* 8 (2005), 375-395
25. The category of lattices over a lattice-finite ring, *Algebr. Represent. Theory* 8 (2005), 323-345
26. Infinite rank representations of orders in non-semisimple algebras, and module categories, *Fundam. Prikl. Mat.* 11, no.3, (2005) 173-187
27. Unimodular brackets and related structures, *Acta Arithmetica* 120 (2005), 379-394
28. Global theory of lattice-finite noetherian rings, *Algebr. Represent. Theory* 9 (2006), 227-239
29. Modules over braces, *Algebra and Discrete Mathematics* 5 (2006), No. 2, 127-137
30. Braces, radical rings, and the quantum Yang-Baxter equation, *J. Algebra* 307 (2007), 153-170
31. Classification of cyclic braces, *J. Pure Appl. Algebra* 209 (2007), 671-685
32. Arithmetic properties of exceptional lattice paths, *Algebra and Discrete Mathematics* 5 (2006), No. 3, 101-118
33. Schurian vector space categories, hereditary algebras, and Roiter's norm, *J. Algebra* 310 (2007), 648-670
34. Generalized Radical Rings, Unknotted Biquandles, and Quantum Groups, *Colloq. math.* 109 (2007), 85-100
35. Almost fully decomposable infinite rank lattices over orders, *J. Pure Appl. Algebra* 211 (2007), 383-391
36. One-sided Grothendieck quotients, *Arch. math.* 89 (2007), 131-142
37. I-radicals and right perfect rings, *Ukrain. Math. J.* 59 (2007), 1005-1009

38. (with Y. C. Yang) Jaffard-Ohm correspondence and Hochster duality, *Bulletin of the London Math. Soc.* 40 (2008), 263-273
39.  $L$ -algebras, self-similarity, and  $l$ -groups, *J. Algebra* 320 (2008), no. 6, 2328-2348
40. Semidirect products in algebraic logic and solutions of the quantum Yang-Baxter equation, *J. Algebra Appl.* 7 (2008), no. 4, 471-490
41. A counterexample to Raikov's conjecture, *Bulletin of the London Math. Soc.* 40 (2008), no. 6, 985-994
42. (with Y. C. Yang) The essential cover and the absolute cover of a schematic space, *Colloq. math.* 114 (2009), 53-75
43. (with Y. C. Yang) Lateral completion and structure sheaf of an archimedean  $l$ -group, *J. Pure Appl. Algebra* 213 (2009), 136-143
44. The absolute of a topological space and its application to abelian  $l$ -groups, *Applied Categorical Structures* 17 (2009), 153-174
45. Elementary varieties and existence of flat covers, *J. Algebra* 322 (2009), 2131-2149
46. Locally finitely presented categories of sheaves, *J. Pure Appl. Algebra* 214 (2010), 177-186
47. Triadic categories without localization, *J. Algebra* 322 (2009), 995-1012
48. Addendum to: "Generalized Radical Rings, Unknotted Biquandles, and Quantum Groups", *Colloq. math.* 117 (2009), 295-298
49. A general Glivenko theorem, *Algebra univ.* 61 (2009), 455-473
50. (with Qinghua Chen and Meiyong Gong) Trivial Extension of Tilting, *Arch. Math.* 93 (2009), 531-540
51. (with Y. C. Yang) Bézout domains with non-zero unit radical, *Commun. Algebra* 38 (2010), 1-9
52. The tree of primes in a field, *Cubo Math. J.* 12 (2010), 97-124

53. Flat covers in abelian and in non-abelian categories, *Adv. Math.* 225 (2010), 1589-1615
54. Almost split sequences of dimension one, *Commun. Algebra* 38 (2010), no. 8, 2808-2824
55. Objective categories and schemes, *Cahiers de topologie et de géométrie différentielle catégoriques* 51 (2010), no. 4, 243-271
56. The weighted spectrum of a regular ring, *Forum math.* 22 (2010), 683-697
57. Analysis of a problem of Raikov with applications to barreled and bornological spaces, *J. Pure Appl. Algebra* 215 (2011), 44-52
58. (with Y. C. Yang) A note on Bosbach's cone algebras, *Studia Logica* 98, no. 3 (2011), 375-386
59. On the maximal exact structure of an additive category, *Fund. math.* 214 (2011), no. 1, 77-87
60. (with J. Convexity) Convexity of Momentum Maps: A Topological Analysis, *Topology and its Appl.* 159 (2012), 1288-1299
61. (with Y. C. Yang) Intervals in  $l$ -groups as  $L$ -algebras, *Algebra universalis* 67, Nr. 2 (2012), 121-130
62. (with Y. C. Yang) Pseudo-MV algebras as L-algebras, *Multiple-Valued Logic and Soft Computing* 19 (2012), 621-632
63. Injective tree representations, *J. Pure Appl. Algebra* 217 (2013), no. 1, 132-136
64. Quantum B-algebras, *Cent. Eur. J. Math.* 11 (2013), 1881-1899
65. (with Y. C. Yang) Non-commutative logical algebras and algebraic quantales, *Annals Pure Appl. Logic* 165 (2014), no. 2, 759-785
66. (with Y. C. Yang) Non-archimedean directed fields  $K(i)$  with  $o$ -subfields  $K$  and  $i^2 = -1$ , *J. Algebra* 400 (2014), 1-7

67. (with S. Schmider) Flat generic modules, prime ideals, and duality, *J. Algebra* 407 (2014), 149-177
68. The brace of a classical group, *Note Mat.* 34 (2014) no.1, 115-144
69. Serial compact spaces and the maximal spectrum of a Bézout domain, *Topology and its Appl.* 178 (2014), 320-330
70. Abelian lattice-ordered groups and a characterization of the maximal spectrum of a Prüfer domain, *J. Pure Appl. Algebra* 218 (2014), no. 12, 2204-2217
71. Stable short exact sequences and the maximal exact structure of an additive category, *Fund. Math.* 228 (2015), 87-96
72. Right  $l$ -Groups, Geometric Garside Groups, and Solutions of the Quantum Yang-Baxter Equation, *J. Algebra* 439 (2015), 470-510
73. Algebraically closed abelian  $l$ -groups, *Math. Slovaca* 65 (2015), No. 4, 841-862
74. Quasi-linear cycle sets and the retraction problem for set-theoretic solutions of the quantum Yang-Baxter equation, *Algebra Colloquium* 23 (2016), No. 1, 149-166
75. Quadratic equations in tropical regions, *Theor. Appl. Comp. Sci.* 6 (2016), 28-50
76. Characterization of projective quantales, *J. Austral. math. Soc.* 100 (2016), 403-420
77. Dynamical groups and braces, *J. Algebra Appl.* 15 (2016), no. 7,
78. Multi-posets in algebraic logic, group theory, and non-commutative topology, *Annals Pure Appl. Logic* 167 (2016), no. 11, 1139-1160
79. (with Y. C. Yang) Hereditary arithmetics, *J. Algebra* 468 (2016), 214-252
80. The completion of a quantum B-algebra, *Cah. Topol. Géom. Différ. Catég.* 57 (2016), no. 3, 203-228

81. Quantum B-algebras: Their omnipresence in algebraic logic and beyond, *Soft Computing* 21, no. 10, 2521-2529
82. Decomposition of Garside groups and self-similar L-algebras, *J. Algebra* 485 (2017), 118-141
83. Minimal tiled orders of finite global dimension, *Arch. Math.* 109 (2017), no. 1, 29-39
84. The structure group of an L-algebra is torsion-free, *J. Group Theory* 20 (2017), no. 2, 309-324
85. The structure group of a generalized orthomodular lattice, *Studia Logica* 106 (2018), 85-100
86. The  $L$ -algebra of Hurwitz primes, *J. Number Theory* 190 (2018), 394-413
87. Von Neumann algebras,  $L$ -algebras, Baer  $*$ -monoids, and Garside groups, *Forum Math.* 30 (2018), no. 4, 973-995

## Accepted for publication

88. Construction of finite braces, *Ann. Combinatorics*
89. Classification of cyclic braces, II, *Trans. AMS*
90. Set-theoretic solutions to the Yang-Baxter equation, skew-braces, and related near-rings, *J. Algebra Appl.*
91. (with Y. L. Wu and Y. C. Yang) Orthomodular lattices as L-algebras, *Soft Comput.*
92. A covering theory for non-unitary set-theoretic solutions to the Yang-Baxter equation, *J. Algebra*

# Preprints

93. Brown representability and non-existence of extralarge modules
94. Exact categories and infinite tilting
95. Decomposition of Garside groups and non-commutative prime factorization
96. Arc length and area - Reflections on  $e$  and  $\pi$
97. The acyclic closure of an exact category and its triangulation
98. Finite Cohen-Macaulay type in higher dimensions
99.  $L$ -algebras in Logic, Algebra, Geometry, and Topology
100. One-sided orthogonality, orthomodular spaces, quantum sets, and Garside groups
101. Quantalic groups
102. The omnipresence of the cycloid equation
103.  $L$ -effect algebras