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. Şt. 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
- 88. A covering theory for non-unitary set-theoretic solutions to the Yang-Baxter equation, J. Algebra 520 (2019), 136-170
- 89. (with C. Dietzel and X. Zhang) One-sided orthogonality, orthomodular spaces, quantum sets, and Garside groups, J. Algebra 526 (2019), 51-80
- 90. Construction of finite braces, Ann. Combinatorics 23 (2019), 391-416
- 91. Classification of cyclic braces, II, Trans. Amer. Math. Soc. 372 (2019), no. 1, 305-328
- 92. Set-theoretic solutions to the Yang-Baxter equation, skew-braces, and related near-rings, J. Algebra Appl. 18 (2019), no. 8, 22 pp.

Accepted for publication

- 93. (with Y. L. Wu and Y. C. Yang) Orthomodular lattices as Lalgebras, Soft Comput.
- 94. (with X. Zhang) L-effect algebras, Studia Logica
- 95. (with X. Zhang and Wen Ma) Injective hulls of many-sorted ordered algebras, Open Mathematics
- 96. (with Castelli and Pinto) On the indecomposable involutive settheoretic solutions of the Yang-Baxter equation of prime-power size, Commun. Algebra

Preprints

- 97. Brown representability and non-existence of extralarge modules
- 98. Exact categories and infinite tilting
- 99. Decomposition of Garside groups and non-commutative prime factorization
- 100. Arc length and area Reflections on e and π
- 101. The acyclic closure of an exact category and its triangulation
- 102. Finite Cohen-Macaulay type in higher dimensions
- 103. L-algebras in Logic, Algebra, Geometry, and Topology
- 104. Quantalic groups
- 105. The omnipresence of the cycloid equation
- 106. (with C. Dietzel) The structure group of a non-degenerate effect algebra
- 107. Symmetric quantum sets
- 108. One-generator braces of multipermutation level two

- 109. Classification of indecomposable involutive non-degenerate solutions to the Yang-Baxter equation
- 110. Affine structures of decomposable solvable groups
- 111. Classification of the affine structures of a generalized quaternion group of order ≥ 32
- 112. Cocyclic solutions to the Yang-Baxter equation