

**Сведения о научном руководителе диссертации**  
*Жилиной Светланы Александровны*  
*«Комбинаторные свойства бинарных отношений*  
*на вещественных алгебрах Кэли-Диксона»*

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Список основных научных публикаций по специальности 01.01.06 – «математическая логика, алгебра и теория чисел» за 2018-2022 годы:

1. Guterman, A., Khrystik, M., Markova, O. On the lengths of group algebras of finite abelian groups in the semi-simple case // Journal of Algebra and its Applications, 2022, 21:7, 2250140, 14 pp.
2. Guterman, A., Khrystik, M., Markova, O. On the lengths of group algebras of finite abelian groups in the modular case // Journal of Algebra and its Applications, 2022, 21:6, 2250117, 14 pp
3. Guterman, A., Maksaev, A, Promyslov V.V. Pairs of maps preserving singularity on subsets of matrix algebras // Linear Algebra and its Applications, 2022, 644, 1–27
4. Guterman, A.E., Zhilina, S.A. On the lengths of standard composition algebras // Communications in Algebra, 2022, 50:3, 1092–1105.
5. Guterman, A., Johnson, M., Kambites, M., Maksaev, A. Linear functions preserving Green's relations over fields // Linear Algebra and its Applications, 2021, 611, 310–333
6. Guterman, A., Shteyner, P. Linear converters of weak, directional and strong majorizations // Linear Algebra and its Applications, 2021, 613, 320–346
7. Duffner, M.A., Guterman, A.E., Spiridonov, I.A. Converting immanants on skew-symmetric matrices // Linear Algebra and its Applications, 2021, 618, 76–96
8. Guterman A. E., Kudryavtsev D. K. Length function and characteristic sequences of quadratic algebras // Journal of Algebra, 2021, 579, 428–455
9. Arambašić, L., Guterman, A., Kuzma, B., Rajić, R., Zhilina S. Symmetrized Birkhoff–James orthogonality in arbitrary normed spaces // Journal of Mathematical Analysis and Applications, 2021, 502:1, 125203, 16 pp
10. Arambašić, L., Guterman, A., Kuzma, B., Rajić, R., Zhilina S. Operators preserving mutual strong Birkhoff–James orthogonality on  $B(H)$  // Linear Algebra and its Applications, 2021, 624, 27–43
11. Danielyan, S., Guterman, A., Ng T.W. Integrability of diagonalizable matrices and a dual Schoenberg type inequality // Journal of Mathematical Analysis and Applications, 2021, 498:2, 124909, 22 pp
12. Guterman, A.E., Maksaev, A.M. Upper bounds on scrambling index for non-primitive digraphs // Linear and Multilinear Algebra, 2021, 69:11, 2143–2168

13. Guterman, A. E., Spiridonov, I. A. Permanent Polya problem for additive surjective maps // *Linear Algebra and Its Applications*, 2020, 599, 140–155
14. Elyze, M., Guterman, A., Morrison, R., Šivic, K. Higher-distance commuting varieties // *Linear and Multilinear Algebra*, 2020
15. Dahl, G., Guterman, A., Shteyner, P. Majorization for  $(0,1)$ -matrices // *Linear Algebra and its Applications*, 2020, 585, 147–163
16. Guterman, A.E., Kudryavtsev, D.K. Upper bounds for the length of non-associative algebras // *Journal of Algebra*, 2020, 544, 483–497
17. Budrevich, M.V., Guterman, A.E. Kräuter conjecture on permanents is true // *Journal of Combinatorial Theory – Ser. A*, 2019, 162, 306–343
18. Guterman, A.E., Lemos, R., Soares, G. More on geometry of Krein space  $C$ -numerical range // *Applied Mathematics and Computation*, 2019, 352, 258–269
19. Guterman, A., Mary, X., Shteyner, P. On Hartwig–Nambooripad orders // *Semigroup Forum*, 2019, 98, 64–74
20. Guterman, A.E., Markova, O.V., Mehrmann, V. Length realizability for pairs of quasi-commuting matrices // *Linear Algebra and its Applications*, 2019, 568, 135–154
21. Budrevich, M., Dolinar, G., Guterman, A., Kuzma, B. Graph characterization of fully indecomposable nonconvertible  $(0,1)$ -matrices with minimal number of ones // *Ars Mathematica Contemporanea*, 2019, 17:1, 141–151
22. Dahl, G., Guterman, A., Shteyner, P. Majorization for matrix classes // *Linear Algebra and Its Applications*, 2018, 555, 201–221
23. Guterman, A. E., Taranin, K. A. On the values of the permanent of  $(0,1)$ -matrices // *Linear Algebra and Its Applications*, 2018, 552, 256–276
24. Guterman, A.E., Laffey, T., Markova, O.V., Smigoc, H. A resolution of Paz's conjecture in the presence of a nonderogatory matrix // *Linear Algebra and its Applications*, 2018, 543, 234–250
25. Guterman, A., Johnson, M., Kambites, M. Linear isomorphisms preserving Green's relations for matrices over anti-negative semifields // *Linear Algebra and Its Applications*, 2018, 545, 1–14
26. Guterman, A.E., Maksaev, A.M. Maps preserving scrambling index // *Linear and Multilinear Algebra*, 2018, 69:4, 840–851

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