## Публикации 2012-2016 гг., представленные на конкурс

## Шкредов И.Д.

1. On a question of A. Balog, Pacific Journal of Mathematics, 280:1 (2015), 227-240; dx.doi.org/10.2140/pjm.2015..101.
2. О суммах множеств Семереди-Троттера, Transactions of Steklov Mathematical Institute, 289, (2015), 300-309.
3. Новые результаты о суммах и произведениях в R, (with S.V. Konyagin), Transactions of Steklov Mathematical Institute, 294, (2016), 87-98.
4. О суммах множеств, имеющих малое произведение, (with S.V. Konyagin), Transactions of Steklov Mathematical Institute, 3:290, (2015), 304-316.
5. Some new inequalities in additive combinatorics, MJCNT, 3:2 (2013), 237-288.
6. Difference Sets are Not Multiplicatively Closed, Discrete Analysis, 17, (2016), 1-21. DOI: 10.19086/da. 913.
7. Variations on sum-product problem, (with B. Murphy \& O. Roche-Newton), SIDMA, Vol. 29, No. 1, (2015), 514-540.
8. On some problems of Euclidean Ramsey theory, Analysis Mathematica, 41 (2015), 1-12; DOI: 10.1007/s10476-015.
9. Kolmogorov Width of Discrete Linear Spaces: an Approach to Matrix Rigidity, (with A. Samorodnitsky \& S.Yekhanin), CCC, (2015), 1-18; DOI: 10.4230/LIPIcs.CCC.2015.p; ISSN 1433-8092.
10. New sum-product type estimates over finite fields, (with O. Roche-Newton \& M. Rudnev), Advances in Mathematics, 293 (2016), 589-605.
11. On exponential sums over multiplicative subgroups of medium size, Finite Fields Appl., 30 (2014), 72-87.
12. On Heilbronn's exponential sum, Quart. J.Math., (2012), 1-10, doi: 10.1093/qmath/has037.
13. On Gowers norms of some functions, Mat. Zametki, 92:4 (2012), 609-627.
14. Additive dimension and a theorem of Sanders, (with T. Schoen), J. Aust. Math. Soc., 100:1 (2016), 124-144; doi:10.1017/S1446788715000324.
15. On additive shifts of multiplicative subgroups, (with I.V. Vyugin), Mat. Sbornik 203:6 (2012), 81-100. English transl. Mat. Sb. 203:6, 81-100 (2012).
16. Some new results on higher energies, Transactions of MMS, 74:1 (2013), 35-73.
17. Roth's theorem in many variables, (with T. Schoen), Israel J. Math., 199:1 (2014), 287-308.
18. Structural theorems in Additive Combinatorics, Uspekhi Mat. Nauk, v. 70 421:1 (2015), 4699; English transl. Russian Math. Surveys 70:1 (2015) 123-178.
19. Energies and structure of additive sets, Electronic Journal of Combinatorics, 21(3) (2014), \#P3.44, 1-53.
20. Sumsets in quadratic residues, Acta Arith., 164:3 (2014) 221-244.
21. Intersections of Shifts of Multiplicative Subgroups, (with E. Solodkova, I. Vyugin), Mat. Zametki, 100:2 (2016), 185-195; English transl. Mathematical Notes, 100:2 (2016), 189-198. 22. Higher moments of convolutions, (with T. Schoen), J. of Number Theory, 133 (2013), 16931737.

## Список всех публикаций

[1] Recurrence in Mean, Mat. Zametki 72:4 (2002), 625-632; English transl. Mathematical Notes 72:4 (2002), 576-582.
[2] Recurrence of Incomplete Quotients of Continued Fractions, Uspekhi Mat. Nauk 57:4 (2002), 189-190; English transl. Comm. Moscow Math. Soc. 57:4 (2002), 819-821.
[3] Some Additive Problems Connected with Exponential Functions, Uspekhi Mat. Nauk 58:4 (2003), 165-166; English transl. Comm. Moscow Math. Soc. 58:4 (2003), 789-799.
[4] On the Piatetzki-Shapiro Normality Criterion (with N.G. Moshchevitin), Mat. Zametki 73:4 (2003), 577-589; English transl. Mathematical Notes 73:4 (2003), 539-550.
[5] On one Problem of Gowers, Doklady of Russian Academy of Sciences 400:2 (2005), 169-
172; English transl. Doklady Mathematics 71:1 (2005), 46-48.
[6] On a Generalization of Szemer'edi's Theorem, Doklady of Russian Academy of Sciences 405:3 (2005), 315-319; English transl. Doklady Mathematics 72:3 (2005), 899-902.
[7] On the Piatetzki-Shapiro Normality Criterion for Continued Fractions, Fundamentalnaya i Prikladnaya Matematika 16:6 (2010), 177-188. English transl. Journal of Mathematical Sciences Volume 182, Issue 4 (2012), Page 567-575.
[8] On one Problem of Gowers, Izvestiya of Russian Academy of Sciences 70:2 (2006), 176217; English transl. Izvestiya : Mathematics 70:2 (2006), 385-425.
[9] On the multiplicative properties modulo $m$ of numbers with missing digits (with N.G. Moshchevitin), Mat. Zametki 81:3 (2007), 385-404. English transl. Mathematical Notes 81:3-4 (2007), 338-355.
[10] On a Generalization of Szemer'edi's Theorem, Proceedings London Math. Soc., 93:3 (2006), 723-760.
[11] On Dynamical Systems with Slow Recurrence Time, Mat. Sbornik 197:11 (2006), 143-158. English transl. Sbornik: Mathematics 197:11 (2006), 1697-1712.
[12] Szemer'edi's Theorem and Problems Concerning Arithmetic Progressions, Uspekhi
Mat. Nauk 61:6 (2006), 111-178. English transl. Comm. Moscow Math. Soc. 61:6 (2006) 11011166.
[13] On Sets of Large Exponential Sums, Doklady of Russian Academy of Sciences 411:4 (2006),455-459; English transl. Doklady Mathematics 74:3 (2006), 860-864.
[14] On Sets of Large Exponential Sums, Izvestiya of Russian Academy of Sciences, 72, N 1, 161-182, 2008,
[15] Some Examples of Sets of Large Exponential Sums, Mat. Sbornik, 198, N 12 (2007), 105 140.
[16] On Sets with Small Doubling, Mat. Zametki, 84:6 (2008), 927-947;
[17] On a two-dimensional analog of Szemer'edi's Theorem in Abelian groups, Izvestiya of Russian Academy of Sciences, 73:5 (2009), 455-505;
[18] On sumsets of dissociated sets, Online Journal of Analytic Combinatorics, 4 (2009), 1-26.
[19] On a result of J. Bourgain (with S.V. Konyagin), Ukr. Mat. J., 62:3 (2010), 332-368.
[20] On monochromatic solutions of some nonlinear equations in Z/pZ, Mat. Zametki, 88:4 (2010), 626-635; English transl. Mathematical Notes, 88:4 (2010), 40-48.
[21] On an inverse theorem for $\mathrm{U}\left(\right.$ _ $\left.^{\prime}\right)$-norm, Modern problems of mathematics and mechanics, Mathematics, Dynamical systems, v. 4, 2, (2009) 55-127.
[22] Some applications of W. Rudins inequality to problems of combinatorial number theory, Uniform Distribution Theory, 6:2 (2011), 95-116.
[23] Fourier analysis in combinatorial number theory, Uspekhi Mat. Nauk, v. $5393: 3$ (2010), 88-
144; English transl. Russian Math. Surveys 65:3 (2010) 513-567.
[24] On Gowers norms of some functions, Mat. Zametki, 92:4 (2012), 609-627.
[25] Sets with large additive energy and symmetric sets (with S. Yekhanin), Journal of Combinatorial Theory, Series A, 118 (2011) 1086-1093,
[26] Additive properties of multiplicative subgroups of Fp, (with T. Schoen), Quart. J. Math. 63:3 (2012), 713-722.
[27] On additive shifts of multiplicative subgroups, (with I.V. Vyugin), Mat. Sbornik 203:6 (2012), 81-100. English transl. Mat. Sb. 203:6, 81-100 (2012).
[28] On sumsets of convex sets, (with T. Schoen), Combin. Probab. Comput. 20 (2011), 793798.
[29] Roth's theorem in many variables, (with T. Schoen), Israel J. Math., 199:1 (2014), 287-308.
[30] Higher moments of convolutions, (with T. Schoen), J. of Number Theory, 133 (2013), 1693-1737.
[31] Some new inequalities in additive combinatorics, MJCNT, 3:2 (2013), 237-288.
[32] On Heilbronn's exponential sum, Quart. J.Math., (2012), 1-10, doi: 10.1093/qmath/has037.
[33] Some new results on higher energies, Transactions of MMS, 74:1 (2013), 35-73.
[34] Sumsets in quadratic residues, Acta Arith., 164:3 (2014) 221-244.
[35] On exponential sums over multiplicative subgroups of medium size, Finite Fields Appl., 30 (2014), 72-87.
[36] Variations on the sum-product problem, (with B. Murphy \& O. Roche-Newton), SIDMA, Vol. 29, No. 1, (2015), 514-540.
[37] Quantitative version of Beurling-Helson theorem, (with S.V. Konyagin), Function Anal. \& Appl., 49:2, (2015), 39-53.
[38] On Wiener norm of subsets of Zp of medium size, (with S.V. Konyagin), Fund. and Applied Math., 19:5 (2014), 75-87.
[39] Additive dimension and a theorem of Sanders, (with T. Schoen), J. Aust. Math. Soc., 100:1 (2016), 124-144; doi:10.1017/S1446788715000324.
[40] Intersections of Shifts of Multiplicative Subgroups, (with E. Solodkova, I. Vyugin), Mat. Zametki, 100:2 (2016), 185-195; English transl. Mathematical Notes, 100:2 (2016), 189-198. [41] On the additive energy of Heilbronn's subgroup, (with E. Solodkova, I. Vyugin), Mat. Zametki, accepted.
[42] Energies and structure of additive sets, Electronic Journal of Combinatorics, 21(3) (2014), \#P3.44, 1-53.
[43] New sum-product type estimates over finite fields, (with O. Roche-Newton \& M. Rudnev), Advances in Mathematics, 293 (2016), 589-605.
[44] Structural theorems in Additive Combinatorics, Uspekhi Mat. Nauk, v. $70421: 1$ (2015), 46-
99; English transl. Russian Math. Surveys 70:1 (2015) 123-178.
[45] On sums of Szemer'edi-Trotter sets, Transactions of Steklov Mathematical Institute, 289, (2015), 300-309.
[46] Kolmogorov Width of Discrete Linear Spaces: an Approach to Matrix Rigidity, (with A. Samorodnitsky \& S.Yekhanin), CCC, (2015), 1-18; DOI: 10.4230/LIPIcs.CCC.2015.p; ISSN 1433-8092.
[47] On a question of A. Balog, Pacific Journal of Mathematics, 280:1 (2015), 227-240; dx.doi.org/10.2140/pjm.2015..101.
[48] On sum sets of sets, having small product sets, (with S.V. Konyagin), Transactions of Steklov Mathematical Institute, 3:290, (2015), 304-316.
[49] On tripling constant of multiplicative subgroups, Integers, accepted.
[50] On the number of unit-area triangles spanned by convex grids in the plane, (with Orit E.
Raz, Micha Sharir), SIAM, accepted.
[51] On some problems of Euclidean Ramsey theory, Analysis Mathematica, 41 (2015), 1-12; DOI: 10.1007/s10476-015. Also, see Analysis Math., 42:3 (2016), 295. DOI:
10.1007/s10476-016-0305-8.
[52] Differences of subgroups in subgroups, Integers, accepted.
[53] Growth Estimates in Positive Characteristic via Collisions, (with E. Aksoy Yazici, B. Murphy, M. Rudnev), International Mathematics Research Notices, Vol. 2009, doi:10.1093/imrn/rnn999.
[54] Difference sets are not multiplicatively closed, Discrete Analysis, 17, (2016), 1-21. DOI: 10.19086/da.913.
[55] New results on sum-products in R, (with S.V. Konyagin), Transactions of Steklov Mathematical Institute, 294, (2016), 87-98.
[56] Some remarks on sets with small quotient set, Transactions of Steklov Mathematical Institute, accepted.
[57] Some remarks on the Balog-Wooley decomposition theorem and quantities $\mathrm{D}_{+}$, D $\times$, Transactions of Steklov Mathematical Institute, accepted.
[58] A remark on A+B and A-A for compact sets in Rn, (with T. Schoen), Integers, accepted.
[59] Sums of multiplicative characters with additive convolutions, (with A.S. Volostnov), Transactions of Steklov Mathematical Institute, accepted.
[60] On additive bases of sets with small product set, (with D. Zhelezov), IMRN, accepted.

