

LIST OF PUBLICATIONS

of

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1. Publications in Scientific Journals

[1.28] Peter Boyvalenkov, Peter Dragnev, Douglas Hardin, Edward Saff, Maya Stoyanova, *Universal minima of discrete potentials for sharp spherical codes*, Revista Matemática Iberoamericana, 2025, Vol. 41, No. 2, ISSN (print): 0213-2230, ISSN (digital): 2235-0616, pages: 603-650, Ref Web of Science, Impact Factor: 1.3 (2023), Web of Science Quartile: Q₁ (67/490 Math, JCR-2023),

<https://doi.org/10.4171/rmi/1509>,

<https://www.webofscience.com/wos/woscc/full-record/WOS:001454846500005>,

<https://arxiv.org/abs/2211.00092>.

[1.27] Sergiy Borodachov, Peter Boyvalenkov, Peter Dragnev, Douglas Hardin, Edward Saff, Maya Stoyanova, *Energy bounds for weighted spherical codes and designs via linear programming*, Analysis and Mathematical Physics (AAMP), vol:15, issue:1, Article number: 19, 35 pages, 2025, ISSN (print): 1664-2368, ISSN (online): 1664-235X, Ref Web of Science, Impact Factor: 1.4 (2023), Web of Science Quartile: Q₁ (57/490 Math, JCR-2023),

<https://doi.org/10.1007/s13324-024-01009-7>,

<https://link.springer.com/article/10.1007/s13324-024-01009-7>,

<https://arxiv.org/abs/2403.07457>.

Announced in [2.25].

[1.26] P. G. Boyvalenkov, P. D. Dragnev, D. P. Hardin, E. B. Saff, M. M. Stoyanova, *On polarization of spherical codes and designs*, Journal of Mathematical Analysis and Applications, 2023, Volume 524, Issue 1, 1 August 2023, Article number: 127065, ISSN: 0022-247X, EISSN: 1096-0813, <https://doi.org/10.1016/j.jmaa.2023.127065>, Ref Web of Science, Impact Factor: 1.2 (2023), Web of Science Quartile: Q₁ (80/490 Math, JCR-2023), <https://arxiv.org/abs/2207.08807>.

[1.25] Alexander Barg, Peter Boyvalenkov, Maya Stoyanova, *Bounds for the sum of distances of spherical sets of small size*, Discrete Mathematics, volume: 346, issue: 5, May 2023, Article number: 113346, ISSN: 0012-365X, <https://doi.org/10.1016/j.disc.2023.113346>, Ref Web of Science, Impact Factor: 0.7 (2023), Web of Science Quartile: Q₂ (218/490 Math, JCR-2023), <https://www.sciencedirect.com/science/article/abs/pii/S0012365X23000328?via%3Dihub>, <https://arxiv.org/abs/2105.03511>.

[1.24] P. G. Boyvalenkov, P. D. Dragnev, D. P. Hardin, E. B. Saff, M. M. Stoyanova, *Bounds for spherical codes: The Levenshtein framework lifted*, Mathematics of Computation, vol:90, issue:329, 2021, pages:1323-1356, ISSN (print):0025-5718, ISSN (online):1088-6842, <https://doi.org/10.1090/mcom/3621>, Ref Web of Science, IF: 2.118 (2021), Web of Science Quartile: Q₂ (JCR-2021),

<https://www.ams.org/journals/mcom/2021-90-329/S0025-5718-2021-03621-2/>.
<https://arxiv.org/abs/1906.03062>.

[1.23] P. G. Boyvalenkov, P. D. Dragnev, D. P. Hardin, E. B. Saff, M. M. Stoyanova, *Universal Bounds for Size and Energy of Codes of Given Minimum and Maximum Distances*, IEEE Transactions on Information Theory, vol:67, issue:6, 2021, pages:3569-3584, ISSN (print): 0018-9448, ISSN (online): 1557-9654, <http://dx.doi.org/10.1109/tit.2021.3056319>, Ref Web of Science, IF: 2.978 (2021), Web of Science Quartile: Q₂ (JCR-2021), <https://ieeexplore.ieee.org/document/9344843>, <https://arxiv.org/abs/1910.07274>.

[1.22] Silvia Boumova, Tedis Ramaj, Maya Stoyanova, *Computing distance distributions of ternary orthogonal arrays*, Comptes rendus de l'Académie bulgare des Sciences, vol:74, issue:2, 2021, pages:177-189, ISSN (print): 1310-1331, ISSN (online): 2367-5535, DOI:10.7546/CRABS.2021.02.03, Ref Web of Science, IF: 0.326 (2021), Web of Science Quartile: Q₄ (JCR-2021), http://www.proceedings.bas.bg/DOI/doi2021_2_03.html.

[1.21] Peter Boyvalenkov, Maya Stoyanova, *Linear programming bounds for covering radius of spherical designs*, Results in Mathematics, vol:76, issue:article number: 95, 2021, ISSN (print): 1422-6383, ISSN (online): 1420-9012, <https://doi.org/10.1007/s00025-021-01400-x>, Ref Web of Science, IF: 2.214 (2021), Web of Science Quartile: Q₁ (JCR-2021), <https://link.springer.com/article/10.1007%2Fs00025-021-01400-x>, <https://arxiv.org/abs/2007.05599>.

[1.20] Peter G. Boyvalenkov, Peter D. Dragnev, Douglas P. Hardin, Edward B. Saff, Maya M. Stoyanova, *Upper bounds for energies of spherical codes of given cardinality and separation*, Designs, Codes and Cryptography, vol:88, issue:9, 2020, pages: 1811-1826, ISSN (print): 0925-1022, ISSN (online): 1573-7586, <https://doi.org/10.1007/s10623-020-00733-y>, Ref Web of Science, Impact Factor: 1.492 (2020), Web of Science Quartile: Q₂ (JCR-2020), <https://link.springer.com/article/10.1007/s10623-020-00733-y>, <https://arxiv.org/abs/1909.00981>, Announced in [2.19].

[1.19] S. Boumova, T. Marinova, T. Ramaj, M. Stoyanova, *Nonexistence of (17, 108, 3) ternary orthogonal array*, Annual of Sofia University "St. Kliment Ohridski", Faculty of Mathematics and Informatics, vol:106, 2019, pages:117-126, ISSN (print):1313-9215, ISSN (online):2603-5529, Ref MathSciNet (MR4125835), Ref zbMATH ([Zbl 07360437](https://zbmath.org/journal/Zbl07360437)), <https://www.fmi.uni-sofia.bg/bg/nonexistence-17-108-3-ternary-orthogonal-array>.

[1.18] Peter Boyvalenkov, Peter Dragnev, Douglas Hardin, Edward Saff, Maya Stoyanova, *Energy Bounds for Codes in Polynomial Metric Spaces*, Analysis and Mathematical Physics, 2019, Volume 9, Issue 2, pages: 781-808, (in Conference Proceedings, as a special issue of the Journal "Analysis and Mathematical Physics", Received: 18 December 2018, Accepted: 11 April 2019, First Online: 06 June 2019), ISSN: 1664-2368 (Print), ISSN: 1664-235X (Online), <https://doi.org/10.1007/s13324-019-00313-x>, Ref Web of Science, Impact Factor: 2.056 (2019), Web of Science Quartile: Q₁ (JCR-2019), <https://link.springer.com/article/10.1007/s13324-019-00313-x>, <https://arxiv.org/abs/1804.07462>.

[1.17] P. G. Boyvalenkov, P. D. Dragnev, D. P. Hardin, E. B. Saff, M. M. Stoyanova, *On spherical codes with inner products in a prescribed interval*, Designs, Codes and Cryptography,

2019, volume 87, issue 2-3, pages: 299-315, (Received: 29 December 2017, Revised: 07 June 2018, Accepted: 17 July 2018, First Online: 26 July 2018), ISSN: 0925-1022 (Print), ISSN: 1573-7586 (Online), <https://doi.org/10.1007/s10623-018-0524-z>, Ref Web of Science, Impact Factor: 1.524 (2019), Web of Science Quartile: Q₂ (JCR-2019), <https://link.springer.com/article/10.1007/s10623-018-0524-z>, <https://arxiv.org/abs/1801.07334>.
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[1.16] Peter Boyvalenkov, Danyo Danev, Maya Stoyanova, *Refinements of Levenshtein bounds in q-ary Hamming spaces*, Problems of Information Transmission, 2018, Vol. 54, Issue 4, pages: 329–342, (Original Russian Text Published in Problemy Peredachi Informatsii, 2018, Vol. 54, Issue 4, pages: 35–50, ISSN: 0555-2923, Received: 12 December 2017, Revised: 16 May 2018, Accepted: 10 August 2018, First Online: 28 January 2019), ISSN: 0032-9460 (Print), ISSN: 1608-3253 (Online), <https://doi.org/10.1134/S0032946018040026>, Ref Web of Science, Impact Factor: 0.557 (2018), Web of Science Quartile: Q₄ (JCR-2018), <https://link.springer.com/article/10.1134/S0032946018040026>, <https://arxiv.org/abs/1801.01982>.

[1.15] Tanya Marinova, Maya Stoyanova, *Nonexistence of (9, 112, 4) and (10, 224, 5) binary orthogonal arrays*, Electronic Notes in Discrete Mathematics, 2017, Vol. 57, pages: 153–159, (Algebraic and combinatorial coding theory – 2016, Selected papers from the 15th international workshop (ACCT-XV), Albena, Bulgaria, June 18–24, 2016), ISSN: 1571-0653 (Print), <http://doi.org/10.1016/j.endm.2017.02.026>, Ref Scopus, SJR: 0.262 (2017), <http://www.sciencedirect.com/science/article/pii/S1571065317300264>,
Announced in [1.15a].

[1.14] P. Boyvalenkov, P. Dragnev, D. Hardin, E. Saff, M. Stoyanova, *Universal Lower Bounds on Energy and LP-Extremal Polynomials for (4,24)-Codes*, Electronic Notes in Discrete Mathematics, 2017, Vol. 57, pages: 91–96, (Algebraic and combinatorial coding theory – 2016, Selected papers from the 15th international workshop (ACCT-XV), Albena, Bulgaria, June 18–24, 2016), ISSN: 1571-0653 (Print), <http://dx.doi.org/10.1016/j.endm.2017.02.016>, Ref Scopus, SJR: 0.262 (2017), <http://www.sciencedirect.com/science/article/pii/S1571065317300161>,
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[1.13] Peter Boyvalenkov, Tanya Marinova, Maya Stoyanova, *Nonexistence of a few binary orthogonal arrays*, Discrete Applied Mathematics, 2017, Vol. 217, Issue 2, pages: 144–150, (Available online: 30 August 2016), ISSN: 0166-218X (Print), <https://doi.org/10.1016/j.dam.2016.07.023>, Ref Web of Science, Impact Factor: 0.932 (2017), Web of Science Quartile: Q₃ (JCR-2017), <http://www.sciencedirect.com/science/article/pii/S0166218X1630364X>, <http://arxiv.org/abs/1604.06117>.
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[1.12] P. G. Boyvalenkov, P. D. Dragnev, D. P. Hardin, E. B. Saff, M. M. Stoyanova, *Energy bounds for codes and designs in Hamming spaces*, Designs, Codes and Cryptography, 2017, Vol. 82, Issue I, pages 411–433, (Received: 12 October 2015, Revised: 23 September 2016, Accepted: 26 September 2016, First Online: 14 October 2016), ISSN: 0925-1022 (Print),

ISSN: 1573-7586 (Online), <https://doi.org/10.1007/s10623-016-0286-4>, Ref Web of Science, Impact Factor: 1.114 (2017), Web of Science Quartile: Q₂ (JCR-2017), <http://link.springer.com/article/10.1007%2Fs10623-016-0286-4>, <https://arxiv.org/abs/1510.03406>.
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[1.11] P. G. Boyvalenkov, P. D. Dragnev, D. P. Hardin, E. B. Saff, M. M. Stoyanova, *Universal lower bounds for potential energy of spherical codes*, Constructive Approximation, 2016, Vol. 44, Issue 3, pages: 385–415, (Received: 24 March 2015, Revised: 02 November 2015, Accepted: 11 December 2015, First Online: 29 February 2016), ISSN: 0176-4276 (Print), ISSN: 1432-0940 (Online), <https://doi.org/10.1007/s00365-016-9327-5>, Ref Web of Science, Impact Factor: 0.964 (2016), Web of Science Quartile: Q₁ (JCR-2016), <http://link.springer.com/article/10.1007/s00365-016-9327-5>, <https://arxiv.org/abs/1503.07228>.

[1.10] P. G. Boyvalenkov, P. D. Dragnev, D. P. Hardin, E. B. Saff, M. M. Stoyanova, *Universal upper and lower bounds on energy of spherical designs*, Dolomites Research Notes on Approximation, Padova University Press, Special Issue for the “10 years of the Padua points”, 2015, Vol. 8, pages: 51–65, ISSN: 20356803 (Print), <http://dx.doi.org/10.14658/pupj-drna-2015-Special-Issue-6>, Ref Scopus, SJR: 0.344 (2015), <http://drna.padovauniversitypress.it/2015/specialissue/6>, <https://arxiv.org/abs/1509.07837>.

[1.9] Peter Boyvalenkov, Tanya Marinova, Maya Stoyanova, Mila Sukalinska, *Distance distributions and energy of designs in Hamming spaces*, Serdica Journal of Computing, 2015, Vol. 9, Issue 2, pages: 139–150, ISSN: 1312-6555 (Print), ISSN: 1314-7897 (Online), Ref MathSciNet (MR3526249), Ref zbMATH ([Zbl 1387.94112](https://zbmath.org/journal/Zbl1387.94112)), <http://serdica-comp.math.bas.bg/index.php/serdicajcomputing/article/view/251>.

[1.8] Boyvalenkov P., Kulina H., Marinova T., Stoyanova M., *Nonexistence of binary orthogonal arrays via their distance distributions*, Problems of Information Transmission, 2015, Vol. 51, Issue 4, pages: 326–334, (Original Russian Text Published in Problemy Peredachi Informatzii, 2015, Vol. 51, Issue 4, pages: 23–31, ISSN: 0555-2923, Received: 20 December 2014, Accepted: 20 July 2015, First Online: 05 January 2016), ISSN 0032-9460 (Print), ISSN 1608-3253 (Online), <https://doi.org/10.1134/S003294601504002X>, Ref Web of Science, Impact Factor: 0.632 (2015), Web of Science Quartile: Q₃ (JCR-2015), <http://link.springer.com/article/10.1134/S003294601504002X>.

[1.7] Peter Boyvalenkov, Maya Stoyanova, *New nonexistence results for spherical designs*, Advances in Mathematics of Communications, 2013, Vol. 7, Issue 3, pages: 279–292, ISSN: 1930-5346 (Print), eISSN: 1930-5338 (Online), <http://dx.doi.org/10.3934/amc.2013.7.279>, (Received: July 2012, Revised: March 2013, Available online: July 2013), Ref Web of Science, Impact Factor: 0.651 (2013), Web of Science Quartile: Q₃ (JCR-2013), <http://www.aims sciences.org/journals/displayArticlesnew.jsp?paperID=8815>.

[1.6] Peter Boyvalenkov, Maya Stoyanova, *Improved approaches for investigation of small spherical designs*, Compt. rend. Acad. bulg. Sci., 2012, Vol. 65, Issue 6, pages: 743–750, ISSN 1310–1331 (Print), ISSN 2367–5535 (Online), Ref Web of Science, Impact Factor: 0.211 (2012), Web of Science Quartile: Q₄ (JCR-2012), <http://www.proceedings.bas.bg/>.

[1.5] Peter Boyvalenkov, Maya Stoyanova, *A new asymptotic bound of the minimum possible odd cardinality of spherical $(2k-1)$ -designs*, Discrete Mathematics, 2010, Vol. 310, Issues 15-16, pages: 2170–2175, ISSN: 0012-365X, <https://doi.org/10.1016/j.disc.2010.04.007>, (Available online: 13 May 2010), Ref Web of Science, Impact Factor: 0.536 (2010), Web of Science Quartile: Q₃ (JCR-2010), <http://www.sciencedirect.com/science/article/pii/S0012365X10001408>.

[1.4] S. Boumova, P. Boyvalenkov, M. Stoyanova, *A method for proving nonexistence of spherical designs of odd strength and odd cardinality*, Problems of Information Transmission, 2009, Vol. 45, Issue 2, pages: 110–123, (Original Russian Text Published in Problemy Peredachi Informatsii, 2009, Vol. 45, Issue 2, pages: 41–55, ISSN: 0555-2923, Received: 27 July 2008, Accepted: 27 December 2008, First Online: 18 July 2009), Print ISSN 0032-9460, Online ISSN 1608-3253, <https://doi.org/10.1134/S0032946009020033>; Ref Web of Science, Impact Factor: 0.393 (2009), Web of Science Quartile: Q₄ (JCR-2009), <http://www.springerlink.com/content/j38w25728jk60728/>.

[1.3] Silvia Boumova, Peter Boyvalenkov, Hristina Kulina, Maya Stoyanova, *Polynomial techniques for investigation of spherical designs*, Designs, Codes and Cryptography, 2009, Vol. 51, Issue 3, pages: 275–288, ISSN: 0925-1022 (Print), ISSN: 1573-7586 (Online), <https://doi.org/10.1007/s10623-008-9260-0>, (Received: 21 February 2008, Revised: 01 December 2008, Accepted: 03 December 2008, First Online: 19 December 2008), Ref Web of Science, Impact Factor: 0.825 (2009), Web of Science Quartile: Q₂ (JCR-2009), <http://www.springerlink.com/content/82558663w81hnp05/>.

[1.2] Silvia Boumova, Peter Boyvalenkov, Hristina Kulina, Maya Stoyanova, *New nonexistence results for spherical 5-designs*, Scientific Research, a Journal of South-West University, Blagoevgrad, Bulgaria, 2007, 14 pages, ISSN: 1312-7535, Ref zbMATH ([Zbl 1238.05043](https://zbmath.org/journals/SWU/SWU_1312-7535/2007-14_1238.05043)), <http://press.swu.bg/volume-collection/volume-5/new-nonexistence-results-for-spherical-5-designs.aspx>.

[1.1] Peter Boyvalenkov, Maya Stoyanova, *Spherical 2-distance sets which are spherical 3-designs*, Annuaire L'Univ Sofia, Fac. Math. and Inform., 2004, Vol. 95, pages: 53–58, (received on December 14, 2001), ISSN: 1313-9215 (Print), ISSN: 2603-5529 (Online), Ref MathSciNet (MR2131506), Ref zbMATH ([Zbl 1076.05018](https://zbmath.org/journals/ANU/ANU_1313-9215/2004-95_53-58)), <https://www.fmi.uni-sofia.bg/bg/spherical-2-distance-sets-which-are-spherical-3-designs>.

2. Publications in volumes of Scientific Conferences

[2.25] Sergey Borodachov, Peter Boyvalenkov, Peter Dragnev, Douglas Hardin, Edward Saff, Maya Stoyanova, *Linear programming lower bounds for energy of weighted spherical codes*, WCC 2024: The Thirteenth International Workshop on Coding and Cryptography, June 17-21, 2024, Perugia, Italy, pages: 77-86, <https://wcc2024.sites.dmi.unipg.it/index.html>, <https://arxiv.org/abs/2403.07457>.

[2.24] Boumova S., Boyvalenkov P., Stoyanova M., *Bounds for the minimum distance and covering radius of orthogonal arrays via their distance distributions*, 2022 10th International Workshop on Signal Design and Its Applications in Communications (IWSDA), August 1-5,

2022, University of Essex, Colchester, United Kingdom, Publisher: IEEE, 2022, DOI:10.1109/IWSDA50346.2022.9870612, ISSN(print):2150-3680, ISSN(online):2150-3699, ISBN: 978-1-6654-5298-4, Ref Web of Science, Ref Scopus, Ref IEEE Xplore (9870612).

[2.23] Maya Stoyanova, *Universal bounds for cardinalities and energy of codes in Hamming spaces*, Mathematics and Education in Mathematics, Proceedings of the Fifty First Spring Conference of the Union of Bulgarian Mathematicians, editor/s: Assoc. Prof. Evgenia Sendova, Ph.D., Tryavna, April 5-9, 2022, pages:100-112, ISSN(print):1313-3330, ISSN(online):1313-3330, Ref Scopus, http://www.math.bas.bg/smb/2022_PK/tom_2022/pdf/100-112.pdf.

[2.22] Silvia Boumova, Tedis Ramaj, Maya Stoyanova, *On Covering Radius of Orthogonal Arrays*, 2020 Algebraic and Combinatorial Coding Theory (ACCT), Date of Conference: 11-17 Oct. 2020, Conference Location: Albena, Bulgaria, Date Added to IEEE Xplore: 25 March 2021, 2021, pages:23-28, Electronic ISBN:978-1-6654-0287-3, Print on Demand(PoD) ISBN: 978-1-6654-0288-0, DOI: [10.1109/ACCT51235.2020.9383398](https://doi.org/10.1109/ACCT51235.2020.9383398), Ref Web of Science, Ref Scopus, Ref IEEE Xplore, <https://ieeexplore.ieee.org/document/9383398>.

[2.21] Peter G. Boyvalenkov, Peter D. Dragnev, Douglas P. Hardin, Edward B. Saff, Maya M. Stoyanova, *On two problems concerning universal bounds for codes*, 2019 XVI International Symposium Problems of Redundancy in Information and Control Systems (REDUNDANCY 2019), Moscow, Russia, October, 21-25, 2019, pages: 58 – 63, INSPEC Accession Number: 19380412, Electronic ISBN: 978-1-7281-1944-1, Print on Demand (PoD) ISBN: 978-1-7281-1945-8, DOI: [10.1109/REDUNDANCY48165.2019.9003329](https://doi.org/10.1109/REDUNDANCY48165.2019.9003329), Ref Web of Science, Ref Scopus, Ref IEEE Xplore, [On Two Problems Concerning Universal Bounds for Codes | IEEE Conference Publication | IEEE Xplore](#).

[2.20] Peter Boyvalenkov, Peter Dragnev, Douglas Hardin, Edward Saff, Maya Stoyanova, *Linear Programming Bounds for Cardinality and Energy of Codes of Given Min and Max Distances*, ISIT 2019: The 2019 IEEE International Symposium on Information Theory, Paris, France, July 7-12, 2019, pages: 1747-1751, ISSN: 21578095, INSPEC Accession Number: 19013211, Electronic ISBN:978-1-5386-9291-2, USB ISBN: 978-1-5386-9290-5, Print on Demand(PoD) ISBN: 978-1-5386-9292-9, DOI: [10.1109/ISIT.2019.8849388](https://doi.org/10.1109/ISIT.2019.8849388), Ref Scopus, SJR: 0.91 (2019), Ref IEEE Xplore, <https://ieeexplore.ieee.org/document/8849388>
<https://2019.ieee-isit.org/Papers/AcceptedPapers.asp>.

[2.19] Peter G. Boyvalenkov, Peter D. Dragnev, Douglas P. Hardin, Edward B. Saff, Maya M. Stoyanova, *Upper bounds for energies of codes of given cardinality and separation*, The Eleventh International Workshop on Coding and Cryptography (WCC 2019), Saint-Jacut-de-la-Mer, France, from March 31st to April 5th 2019, <https://www.lebesgue.fr/content/sem2019-WCC-Accepted%20papers>.

[2.18] Silvia Boumova, Tanya Marinova, Maya Stoyanova, *On ternary orthogonal arrays*, Proc. Sixteenth International Workshop on Algebraic and Combinatorial Coding Theory, ACCT-16, Svetlogorsk (Kaliningrad region), Russia, September 2-9, 2018, pages:102-105, <http://acct2018.skoltech.ru/>.

[2.17] Peter G. Boyvalenkov, Peter D. Dragnev, Douglas P. Hardin, Edward B. Saff, Maya M. Stoyanova, *Bounding energies and cardinalities of spherical codes with inner products in prescribed interval*, extended abstract, The Tenth International Workshop on Coding and

Cryptography (WCC 2017), St. Petersburg, Russia, September 18-22, 2017, <http://wcc2017.suai.ru/papers.html>.

[2.16] Peter G. Boyvalenkov, Peter D. Dragnev, Douglas P. Hardin, Edward B. Saff, Maya M. Stoyanova, *Lower energy bounds for antipodal spherical codes and for codes in infinite projective spaces*, 2016 15th International Symposium on Problems of Redundancy in Information and Control Systems (REDUNDANCY 2016), September 26-29, 2016, St. Petersburg, Russia, pages: 28–32, 978-1-5090-4231-9/16/2016 IEEE, DOI: [10.1109/RED.2016.7779322](https://doi.org/10.1109/RED.2016.7779322), Electronic ISBN: 978-1-5090-4231-9, USB ISBN: 978-1-5090-4230-2, Print on Demand (PoD) ISBN: 978-1-5090-4232-6, INSPEC Accession Number: 16525200, Ref IEEE Xplore, <http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=7779322>.

[2.15] Peter Boyvalenkov, Tanya Marinova, Maya Stoyanova, *New nonexistence results for binary orthogonal arrays*, Proc. Fifteenth International Workshop on Algebraic and Combinatorial Coding Theory, ACCT–15, June 18-24, 2016, Albena, Bulgaria, 2016, pages: 90-95, <https://www.researchgate.net/publication/303693339> *New nonexistence results for binary orthogonal arrays*.

[1.15a] Tanya Marinova, Maya Stoyanova, *Nonexistence of (9, 112, 4) and (10, 224, 5) binary orthogonal arrays*, Proc. Fifteenth International Workshop on Algebraic and Combinatorial Coding Theory, ACCT–15, June 18-24, 2016, Albena, Bulgaria, 2016, pages: 221-226, <https://www.researchgate.net/publication/303702618> *Nonexistence of 9 112 4 and 10 22 4 5 binary orthogonal arrays*.

[1.14a] P. Boyvalenkov, P. Dragnev, D. Hardin, E. Saff, M. Stoyanova, *Universal Lower Bounds on Energy and LP-Extremal Polynomials for (4,24)-Codes*, Proc. Fifteenth International Workshop on Algebraic and Combinatorial Coding Theory, ACCT–15, June 18-24, 2016, Albena, Bulgaria, 2016, pages: 84-89, <https://www.researchgate.net/publication/303693528> *Universal Lower Bounds on Energy and LP-Extremal Polynomials for 424-Codes*.

[2.14] Peter G. Boyvalenkov, Peter D. Dragnev, Douglas P. Hardin, Edward B. Saff, Maya M. Stoyanova, *Energy bounds for codes and designs in Hamming spaces*, Workshop on Coding and Cryptography (WCC 2015), Paris, France, April 13-17, 2015, <http://wcc2015.inria.fr/papers.html>.

[2.13] Boyvalenkov P., Dragnev P., Hardin D., Saff E., Stoyanova M., *On the Riesz energy of spherical designs*, Proc. Fourteenth International Workshop on Algebraic and Combinatorial Coding Theory, ACCT–14, Svetlogorsk (Kaliningrad region), Russia, September 7–13, 2014, pages: 109–114, ISBN: 978-5-901158-26-5, <http://www.moi.math.bas.bg/acct2014/a18.pdf>.

[2.12] Peter Boyvalenkov, Hristina Kulina Maya Stoyanova, *On (4,9,96) binary orthogonal arrays*, Proc. Intern. Workshop OC'13, Albena, Bulgaria, September 6-12, 2013, pages: 71-76, ISSN: 1313-1117, Ref zbMATH ([Zbl 1432.05020](https://zbmath.org/journals/Zbl/1432.05020)), <http://www.moi.math.bas.bg/oc2013/a11.pdf>.

[2.11] Peter Boyvalenkov, Hristina Kulina Maya Stoyanova, *Nonexistence of certain binary orthogonal arrays*, Proc. Intern. Workshop OC'13, Albena, Bulgaria, September 6-12, 2013, pages: 65-70, ISSN: 1313-1117, Ref zbMATH ([Zbl 1432.05019](#)), <http://www.moi.math.bas.bg/oc2013/a10.pdf>.

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Last update: May 7, 2025