

EUROPEAN
CURRICULUM VITAE
FORMAT



PERSONAL INFORMATION

Name	STOYANOVA, MAYA MITEVA
Address	Sofia University “St. Kliment Ohridski” Faculty of Mathematics and Informatics Departments of Algebra 5 James Bourchier Blvd. 1164 Sofia, Bulgaria
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Web of Science Researcher ID	R-4585-2016
Scopus author ID	25923989000
ORCID	0000-0002-8813-3398
Publons	https://publons.com/researcher/1551837/maya-stoyanova/
Google Scholar	https://scholar.google.com/citations?hl=bq&user=-zU4Rw8AAAAJ
Research Gate	https://www.researchgate.net/profile/Maya_Stoyanova
NACID, RAS	https://ras.nacid.bg/dissertation-preview/26473
Semantics Scholar	https://www.semanticscholar.org/author/M.-Stoyanova/2985842
H – index (Web of Science)	5 (07.05.2023)
h – index (Scopus)	6 (07.05.2023)
Nationality	Bulgarian
Date of birth	FEBRUARY 28, 1969

WORK/TEACHING EXPERIENCE

- Dates (from – to) **21/12/2021 – present**
- Name and address of employer **Department of Algebra, Faculty of Mathematics and Informatics, Sofia University “St. Kliment Ohridski”**
- Type of business or sector **Teaching and Research**
- Occupation or position held **Deputy Dean of FMI, Academic Staff, Professor, Ph.D.**

- Main activities and responsibilities Administrative activities, Department of Algebra, Lecturer in Linear algebra, Abstract algebra, Codes and Designs in Polynomial Metric Spaces (I part and II part)
 - Dates (from – to) 20/01/2020 – 21/12/2021
- Name and address of employer Department of Algebra, Faculty of Mathematics and Informatics, Sofia University “St. Kliment Ohridski”
 - Type of business or sector Administration and Management
 - Occupation or position held Deputy Dean of FMI, Academic Staff, Associate Professor, Ph.D.
- Main activities and responsibilities Administrative activities, Lecturer in Linear algebra, Abstract algebra, Codes and Designs in Polynomial Metric Spaces (I part and II part)
 - Dates (from – to) 21/05/2019 – 20/01/2020
- Name and address of employer Department of Algebra, Faculty of Mathematics and Informatics, Sofia University “St. Kliment Ohridski”
 - Type of business or sector Administration and Management
 - Occupation or position held Deputy Dean of FMI, Academic Staff, Head of the Department of Algebra, Assoc. Prof., Ph.D.
- Main activities and responsibilities Administrative activities, Lecturer in Linear algebra, Abstract algebra, Codes and Designs in Polynomial Metric Spaces (I part and II part)
 - Dates (from – to) 13/02/2017 – 09/05/2019
- Name and address of employer Department of Algebra, Faculty of Mathematics and Informatics, Sofia University “St. Kliment Ohridski”
 - Type of business or sector Administration and Management
 - Occupation or position held Deputy Dean of FMI, Doctoral Studies, Scientific Research and International relations, Head of the Department of Algebra, Associate Professor, Ph.D.
- Main activities and responsibilities Administrative activities, Lecturer in Linear algebra, Abstract algebra, Codes and Designs in Polynomial Metric Spaces (I part and II part)
 - Dates (from – to) 11/02/2016 – 13/02/2017; 09/05/2019 – 21/05/2019
- Name and address of employer Department of Algebra, Faculty of Mathematics and Informatics, Sofia University “St. Kliment Ohridski”
 - Type of business or sector Administration and Management
 - Occupation or position held Head of the Department of Algebra, Associate Professor, Ph.D.
- Main activities and responsibilities Administrative activities, Lecturer in Linear algebra, Abstract algebra, Codes and Designs in Polynomial Metric Spaces (I part and II part)
 - Dates (from – to) 08/01/2014 – 11/02/2016
- Name and address of employer Department of Algebra, Faculty of Mathematics and Informatics, Sofia University “St. Kliment Ohridski”
 - Type of business or sector Teaching and Research
 - Occupation or position held Associate Professor, Ph.D.
- Main activities and responsibilities Lectures in Linear algebra, Abstract algebra, Spherical Codes and Designs, Orthogonal Arrays
 - Dates (from – to) 14/01/2005 – 08/01/2014
- Name and address of employer Department of Algebra, Faculty of Mathematics and Informatics, Sofia University “St. Kliment Ohridski”
 - Type of business or sector Teaching and Research
 - Occupation or position held Chief Assistant Professor, Ph.D. (defended in 2009)
- Main activities and responsibilities Lectures and Seminars in Linear algebra, Abstract algebra, Seminar of Algebra
 - Dates (from – to) 14/01/2002 – 14/01/2005
- Name and address of employer Department of Algebra, Faculty of Mathematics and Informatics, Sofia University “St. Kliment Ohridski”
 - Type of business or sector Teaching and Research

- Occupation or position held Senior Assistant Professor
- Main activities and responsibilities Seminars in Linear algebra, Abstract algebra, Seminar of Algebra
- Dates (from – to) 08/11/1999 – 14/01/2002
- Name and address of employer Department of Algebra, Faculty of Mathematics and Informatics, Sofia University “St. Kliment Ohridski”
- Type of business or sector Teaching and Research
- Occupation or position held Assistant
- Main activities and responsibilities Seminars in Linear algebra, Abstract algebra, Linear algebra and analytic geometry
- Dates (from – to) 01/10/1992 – 08/11/1999
- Name and address of employer Department of Geometry, Faculty of Mathematics and Informatics, Sofia University “St. Kliment Ohridski”
- Type of business or sector Teaching
- Occupation or position held Teaching Assistant
- Main activities and responsibilities Seminars in Linear algebra and analytic geometry, Descriptive geometry. Simultaneously, a teacher of Mathematics at TEA “Kirov”.

SCIENTIFIC DEGREE

- Dates (from – to) 19/06/2009
- Name and type of organization Institute of Mathematics and Informatics, Bulgarian Academy of Sciences
- Title of qualification awarded **Ph.D. in Mathematics**, Diploma No 33556/20.08.2009 by the High Attestation Commission at the Council of Ministers of the Republic of Bulgaria, defended: Protocol No 6/19.06.2009, Committee 1, Ph.D. Thesis “On the structure of some spherical codes and designs”, Advisor: Prof. Peter Boyvalenkov, Doctor of sciences.

EDUCATION AND TRAINING

- Dates (from – to) 02/01/2003 – 07/02/2006
- Name and type of organization providing education and training Institute of Mathematics and Informatics, Bulgarian Academy of Sciences, Sofia, Bulgaria
- Principal subjects/occupational skills covered PhD studies in Mathematics
- Title of qualification awarded **PhD in Mathematics**, Diploma No 33556/20.08.2009 by the High Attestation Commission at the Council of Ministers of the Republic of Bulgaria, defended – Protocol No 6/19.06.2009.
- Dates (from – to) 1987 - 1992
- Name and type of organization providing education and training Faculty of Mathematics and Informatics, Sofia University “St. Kliment Ohridski”, Sofia, Bulgaria
- Principal subjects/occupational skills covered Bachelor and Master studies in Mathematics
- Title of qualification awarded **Master’s degree (MSc) in Mathematics**, Diploma No 118528/19.01.1993.

PERSONAL SKILLS AND COMPETENCES

MOTHER TONGUE **BULGARIAN**

OTHER LANGUAGES	<p>ENGLISH excellent very good good</p> <p>RUSSIAN excellent good good</p>
REFeree EXPERIENCE	<p>ARTICLES REFEREE for the journals: Australasian Journal of Combinatorics, Journal of Combinatorial Theory, Series A, SpringerPlus, Mathemaics, Axioms, Comptes rendus de l'Académie bulgare des Sciences, Annual of Sofia University "St. Kliment Ohridski", FMI.</p>
SOCIAL SKILLS AND COMPETENCES	<p>Short Appointments "The Energy Strip for Codes in Polynomial Metric Spaces", Institute for Computational and Experimental Research in Mathematics (ICERM), Brown University, Providence, USA, May 9, 2022 - May 13, 2022, "Minimum Energy and Extremal Problems in Coding Theory", Research in Pairs, 1922p, MFO, Leibniz Association, Oberwolfach, Germany, 26.05.2019 – 08.06.2019, Erasmus+ program, teaching mobility, Linköping University, Linköping, Sweden, 14.04.2019 – 21.04.2019, Spring 2018 Semester Program "Point Computational Experimental Research in Mathematics" Institute for Computational and Experimental Research in Mathematics (ICERM), Brown University, Providence, USA, 22.02.2018 – 23.03.2018, Department of Mathematical Sciences at Indiana Purdue University Fort Wayne, Fort Wayne, IN, USA and Center for Constructive Approximation, Department of Mathematics at Vanderbilt University, Nashville, TN, USA, 23.02.2015 – 26.03.2015, Program on "Minimal Energy Point Sets, Lattices, and Designs" September 29 – November 22, Erwin Schrodinger Institute of Mathematical Physics, Vienna, Austria, October 27-31, 2014.</p>
ORGANISATIONAL SKILLS AND COMPETENCES	<p>MEMBER OF TEAMS OF SCIENTIFIC INTERNATIONAL AND NATIONAL PROJECTS (SEE ANNEX 2.) MEMBERSHIP IN PROFESSIONAL SOCIETIES UNION OF THE BULGARIAN MATHEMATICIANS, 1999 – PRESENT AMERICAN MATHEMATICAL SOCIETY, 2011 – 2015 RESEARCH DATA ALLIANCE (RDA), 2020 – PRESENT MEMBER OF PROGRAMME AND ORGANISING COMMITTEES (SEE ANNEX 3.)</p>
TECHNICAL SKILLS AND COMPETENCES	<p>GOOD LEVEL OF IT AND PRESENTATION SKILLS</p>
DRIVING LICENCE(S)	<p>No</p>
ANNEXES:	<p>Annex 1. Publications Annex 2. Participation in national and international scientific and educational projects Annex 3. Members of the Programme/Organising Committee Annex 4. Conference talks</p>

Annex 1. Publications

1. Publications in Scientific Journals:

[1.27] Peter Boyvalenkov, Peter Dragnev, Douglas Hardin, Edward Saff, Maya Stoyanova, *Universal minima of discrete potentials for sharp spherical codes*, 2023, submitted, <https://arxiv.org/abs/2211.00092>.

[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, August 2023, Article number: 127065, ISSN: 0022-247X, EISSN:1096-0813, <https://doi.org/10.1016/j.jmaa.2023.127065>, <https://www.sciencedirect.com/science/article/abs/pii/S0022247X23000689?via%3Dihub>, <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>, <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>, <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>, <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, 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>, <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>, <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, <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>, <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>, <https://link.springer.com/article/10.1007/s10623-018-0524-z>, <https://arxiv.org/abs/1801.07334>, Announced in [2.17].

[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>, <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>, <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>, <http://www.sciencedirect.com/science/article/pii/S1571065317300161>, Announced in [1.14a].

[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>, <http://www.sciencedirect.com/science/article/pii/S0166218X1630364X>, <http://arxiv.org/abs/1604.06117>, Announced in [2.15].

[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 1, 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](#), <http://link.springer.com/article/10.1007%2Fs10623-016-0286-4>. <https://arxiv.org/abs/1510.03406>,
Announced in [2.14].

[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>, <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, <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), <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 Informatsii, 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>, <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), <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), <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), <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>; <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), <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, <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), <https://www.fmi.uni-sofia.bg/bg/spherical-2-distance-sets-which-are-spherical-3-designs>.

2. Publications in volumes of Scientific Conferences

[2.24] Boumova S., Boyvalenkov P., Stoyanova M., *Bounds for the minimum distance and covering radius of orthogonal arrays via their distance distributions*, Proceedings of The 10th International Workshop on Signal Design and its Applications in Communications, (IWSDA'2022), August 1-5, 2022, University of Essex, Colchester, United Kingdom, 2022, ISBN:978-1-6654-5298-4/22, IEEE Xplore(978-1-6654-5298-4/22).

[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., 2022, pages:100-112, ISSN (print): 1313-3330, ISSN (online): 1313-3330, 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), <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).

[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), <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>.

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IF: 1.417 (2021), [1.26] JMAA	Q ₁ (77/333 Math)
IF: 0.961 (2021), [1.25] DM	Q ₃ (169/333 Math)
IF: 2.118 (2021), [1.24] MathComp	Q ₂ (70/267 Math.App)
IF: 2.978 (2021), [1.23] IEEE	Q ₂ (Q ₂ 122/276 IngEE, Q ₃ 91/164 CSc,InfSys)
IF: 0.326 (2021), [1.22] CrAbS	Q ₄ (74/74 Multidisc),
IF: 2.214 (2021), [1.21] ResMath	Q ₁ (27/333 Math),
IF: 1.492 (2020), [1.20] DCC	Q ₂ (Q ₂ 116/265 MathApp, Q ₃ 61/110 CST&M)
IF: 2.056 (2019), [1.18] APM	Q ₁ (Q ₁ 22/325 Math, Q ₁ 40/261 MathApp)
IF: 1.524 (2019), [1.17] DCC	Q ₂ (Q ₂ 75/261 MathApp, Q ₂ 51/108 CST&M)
IF: 0.557 (2018), [1.16] PIT	Q ₄ (Q ₄ 97/104 CST&M, Q ₄ 227/254 MathApp)
IF: 0.932 (2017), [1.13] DAM	Q ₃ (Q ₃ 136/252 MathApp)
IF: 1.114 (2017), [1.12] DCC	Q ₂ (Q ₂ 103/252 MathApp, Q ₃ 53/103 CST&M)
IF: 0.964 (2016), [1.11] CA	Q ₁ (Q ₁ 67/311 Math)
IF: 0.632 (2015), [1.8] PIT	Q ₃ (Q ₃ 177/254 MathApp, Q ₄ 80/105 CST&M)
IF: 0.651 (2013), [1.7] AMC	Q ₃ (Q ₃ 60/102 CST&M, Q ₃ 154/251 MathApp)
IF: 0.211 (2012), [1.6] CrAbS	Q ₄ (Q ₄ 46/56 Multidisc)
IF: 0.536 (2010), [1.5] DM	Q ₃ (Q ₃ 163/279 Math)
IF: 0.393 (2009), [1.4] PIT	Q ₄ (Q ₄ 83/92 CST&M, Q ₄ 183/204 MathApp)
IF: 0.825 (2009), [1.3] DCC	Q ₂ (Q ₂ 102/204 MathApp, Q ₃ 60/92 CST&M)

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Quartile (Scopus):

SJR: 0.859 (2021), [1.26] JMAA	Q ₁ (Analysis, 2021)
SJR: 0.888 (2021), [1.25] DM	Q ₁ (DMathComb, 2021)
SJR: 1.575 (2021), [1.24] MathComp	Q ₁ (AlgNth, AppMath, CompMath, 2021)
SJR: 1.731 (2021), [1.23] IEEE TIT	Q ₁ (Q ₁ CScApp, Q ₁ InfSys, 2021)
SJR: 0.194 (2021), [1.22] CrAbS	Q ₃ (Q ₃ Multidisc, 2021)
SJR: 0.740 (2021), [1.21] ResMath	Q ₁ (Q ₁ Math, Q ₂ AppMath, 2021)
SJR: 0.898 (2020), [1.20] DCC	Q ₁ (Q ₁ DMathComb, Q ₂ AppMath, Q ₁ CScApp)
SJR: 0.91 (2019), [2.22] ISIT2019	
SJR: 0.593 (2019), [1.18] APM	Q ₂ (Q ₂ AlgNth, Q ₂ Analysis, Q ₂ MathPhysics)
SJR: 1.174 (2019), [1.17] DCC	Q ₁ (Q ₁ DMathComb, Q ₂ AppMath, Q ₁ CScApp)
SJR: 0.282 (2018), [1.16] PIT	Q ₃ (Q ₃ CNetwC, Q ₃ CScApp, Q ₃ InfSys)
SJR: 0.262 (2017), [1.15] ENDM	Q ₃ (Q ₃ DMath&Comb, Q ₄ AppMath),
SJR: 0.262 (2017), [1.14] ENDM	Q ₃ (Q ₃ DMath&Comb, Q ₄ AppMath),
SJR: 0.785 (2017), [1.13] DAM	Q ₂ (Q ₂ DMath&Comb, Q ₂ AppMath)
SJR: 0.549 (2017), [1.12] DCC	Q ₂ (Q ₂ AppMath, Q ₂ CScApp)

SJR: 1.094 (2016), [1.11] CA Q₁ (Q₁ Math, Q₁ CompMath, Q₂ Analysis)
SJR: 0.344 (2015), [1.10] DRNA Q₃ (Q₃ Math, Q₃ AppMath)
SJR: 0.403 (2015), [1.8] PIT Q₂ (Q₂ CNetwC, Q₂ InfSys, Q₃ CscApp)
SJR: 0.675 (2013), [1.7] AMC Q₁ (Q₁ CNetwC, Q₂ AlgNTh, Q₂ AppMath)
SJR: 0.207 (2012), [1.6] CrAbS Q₂ (Q₂ Multidisc)
SJR: 0.845 (2010), [1.5] DM Q₂ (Q₂ DMath&Comb, Q₂ ThCSc)
SJR: 0.347 (2009), [1.4] PIT Q₂ (Q₂ CNetwC, Q₃ CScApp, Q₃ InfSys)
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[Zbl 1265.05085](#), [1.6] CrAbS, 2012
[Zbl 1219.05030](#), [1.5] DM, 2010
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[Zbl 1247.05049](#), [1.3] DCC, 2009
[Zbl 1238.05043](#), [1.2] ScResJSWU, 2007
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[1.23] DOI: [10.1109/TIT.2021.3056319](https://doi.org/10.1109/TIT.2021.3056319),
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Annex 2. Participation in national and international scientific and educational projects

- Sofia University Marking Momentum for Innovation and Technological Transfer (SUMMIT), This project is financially supported by the European Union-NextGenerationEU, through the National Recovery and Resilience Plan of the Republic of Bulgaria, Contract No: BG-RRP-2.004-0008-C01, a member of research group: Numerical Analysis and Approximation Theory (NATATA), with leading researcher: Prof. Bojan Popov, Ph.D., 42 months, 2023 – 2026.
- National Program “Increasing research capacity in the field of mathematical sciences (PICOM)”, Contract No: Д01-67/05.05.2022, 2022-2025, a member of the executive board, a coordinator of the component 3. Ph.D. students, postdoctoral students and young scientists.
- Contract No: BG05M2OP001-2.013-0001, „Student practices - 2“, OP "Development of Human Resources", co-financed by the European Social Fund with beneficiary Ministry of Education and Science, 2020 –2023, <https://praktiki.mon.bg/>.
- Contract No: KP-06-N32/2-2019, Algebraic and Geometric Methods for Information Protection, Bulgarian National Science Fund, Scientific project coordinator – Prof. Peter Boyvalenkov, Dr.Sc., IMI-BAS, 36 months, <http://contract-n32-2019.free.bg/funding.html>, (current).
- National Science Program “Information and Communication Technologies for Unified Digital Market in Science, Education and Security (ICT in SES)”, The program is financially supported by the Ministry of Education and Science, Scientific project coordinator – Prof. Krassen Stefanov, Ph.D., 2019-2021, <https://npict.bg/bg>.
- Coordinator of the international project: Contact 1922p, "Minimum Energy and Extremal Problems in Coding Theory", MFO Research in Pairs program, Leibniz Association, Oberwolfach, Germany, 26 May - 8 June 2019, <https://publications.mfo.de/bitstream/handle/mfo/3819/annual-report-2019.pdf#page=101>.
- Contract No: BG05M2OP001-2.009.0013, 2-year project Doctoral Centre “St. Kliment Ohridski” (DocCent)”, co-funded by the European Social Fund, Sofia University “St. Kliment Ohridski”, Scientific project coordinator – Prof. Maria Stoicheva, Ph.D., 2017-2019, <https://phdsu.blogspot.com/>, a member of the Expert Committee.
- Contract No: DN 15/1, 11.12.2017, "Design and development of a prototype information system "Citation index of publications by Bulgarian authors (social sciences)”, Bulgarian National Science Fund, Scientific project coordinator – Prof. Olya Harizanova, Dr.Sc., Sofia University “St. Kliment Ohridski”, FF, 36 months, <http://citation.uni-sofia.bg/>.
- Contract No: DN 02/2, 13.12.2016, “Codes and Combinatorial Configurations”, Bulgarian National Science Fund, Scientific project coordinator – Prof. Iliya Bouyukliev, Dr.Sc., IMI-BAS, 36 months; <http://www.moi.math.bas.bg/moiuser/~data/>, a coordinator of work package 4: „Orthogonal arrays“.
- Contract No: BG051PO001-4.3.04-0018, "Development of programs for electronic forms of distance learning in the Faculty of Mathematics and Informatics", OP "Development of human resources", co-financed by the European Social Fund, Sofia University “St. Kliment Ohridski”, FMI, Scientific project coordinator – Prof. Krassen Stefanov, Ph.D., 2012 – 2014, <https://eo.fmi.uni-sofia.bg/>.
- Contract No: BG051PO001-3.3.07-0002, „Student practices“, OP "Development of Human Resources", co-financed by the European Social Fund with beneficiary Ministry of Education and Science, 2012 – 2014, <https://praktiki.mon.bg/>.
- Contract No: MM - 1405/2004, “Algebraic and combinatorial methods in coding theory and informatics”, Bulgarian National Science Fund, Scientific project coordinator – Academic Prof. Stefan Dodunekov, Dr. Sc., IMI-BAS.

Annex 3. Members of the Programme/Organising Committee

1. Sphere packings, coverings, and spherical codes (SPCSC2023), May 28 – 31, 2023, Sofia, Bulgaria, Chair of the Organising Committee.
2. The 3rd International Conference on Applied Sciences and Engineering, November 17-18, 2022, Tirana, Albania, member of the Scientific Committee.
3. 47th International Conference Applications of Mathematics in Engineering and Economics, June 7-13, 2021, Sozopol, Bulgaria, member of the Organising Committee.
4. 17th International Workshop on Algebraic and Combinatorial Coding Theory 2020, June 9-15, 2020, Albena, Bulgaria, member of the Organising Committee.
5. Mathematics and Education in Mathematics, 49th Spring Conference of the Union of Bulgarian Mathematicians, September 1-4, 2020, Borovets, hotel "Samokov", member of the Program Committee.
6. Mathematics and Education in Mathematics, 48th Spring Conference of the Union of Bulgarian Mathematicians, April 1-5, 2019, Borovets, hotel "Samokov", member of the Program Committee.
7. 16th International Workshop on Algebraic and Combinatorial Coding Theory 2018, September 2-8, 2018, Svetlogorsk (Kaliningrad region), member of the Organising Committee.
8. Mathematics and Education in Mathematics, 47th Spring Conference of the Union of Bulgarian Mathematicians, April 2-6, 2018, Borovets, hotel "Samokov", member of the Program Committee and member of the Organising Committee.
9. "100 years from the birth of Professor Yaroslav Tagamlitzki" Sofia, September 15-17, 2017, FMI-SU, Sofia, Bulgaria, member of the Organising Committee
10. Spring Scientific Session of FMI-SU, from 2017 to 2023, Chair of the Program Committee.

Annex 4. Conference talks

1. **Universal minima of discrete potentials for sharp spherical codes**, Spring Scientific Session FMI-SU, March 25, 2023.
2. **Трудни или полезни и забавни са комбинаторните конфигурации**, Пролетна научна сесия на ФМИ, 25 Март 2023.
3. **Universal lower bounds on energy and polarization of spherical codes and designs**, The 3rd International Conference on Applied Sciences and Engineering (ICEAS 2022), November 17-18, 2022, Tirana, Albania.
4. **Universal lower bounds on polarization of spherical codes and designs**, National Coding Theory workshop with international participation "Professor Stefan Dodunekov" November 10-13, 2022, Arbanasi, Bulgaria.
5. **ULB bounds on energy and polarization of some spherical sharp codes**, Annual Seminar by Algebra and Geometry, Department of Algebra and Department of Geometry, FMI-SU, August 28 – September 02, 2022.
6. **Universal bounds for cardinalities and energy of codes in Hamming spaces**, Mathematics and Education in Mathematics, The Fifty First Spring Conference of the Union of Bulgarian Mathematicians, April 5-9, 2022.
7. **Bounds for cardinalities and energy of codes in Hamming spaces**, Spring Scientific Session FMI-SU, March 26, 2022 (online via Zoom).
8. **New bounds on minimum distance and covering radius of orthogonal arrays**, Annual Seminar by Algebra and Geometry, Department of Algebra and Department of Geometry, FMI-SU, November 14-19, 2021.
9. **Some bounds on covering radius and minimum distance of orthogonal arrays**, National Coding Theory workshop with international participation "Professor Stefan Dodunekov", November 4-7, 2021, Zlatograd, Bulgaria.
10. **Orthogonal arrays and their distance distributions**, International Conference "Trends in Combinatorial Ring Theory" Dedicated to the 70th anniversary of Vesselin Drensky, September 20-24, 2021, Sofia, Bulgaria.
11. **Some new bounds on covering radius of spherical designs**, Spring Scientific Session FMI-SU, March 27, 2021 (online via Microsoft Teams).
12. **Some LP bounds for covering radius of spherical designs**, National Seminar with International Participation "Mathematical Software and Combinatorial Algorithms", Bulgaria (online via Zoom), December 07-12, 2020.
13. **Next levels universal bounds for spherical codes: lifting the Levenshtein framework**, April 15-19, 2019, Erasmus+ mobility, Linköping University, Linköping, Sweden.
14. **Bounds for Cardinality and Energy of Codes of Given Min and Max Distances**, National Coding Theory workshop with international participation "Professor Stefan Dodunekov", November 21-24, 2019, village of Chiflika, Troyan municipality.
15. **Linear Programming Bounds for Cardinality and Energy of Codes of Given Minimum and Maximum Distances**, Spring Scientific Session FMI-SU "130 anniversary FMI at Sofia University "St. Kliment Ohridski", March 16, 2019.
16. **Universal linear programming bounds for spherical codes: lifting the Levenshtein framework**, The Annual Coding Theory workshop with international participation "Professor Stefan Dodunekov", November 8-11, 2018.
17. **Refinements of Levenshtein bounds in q-ary Hamming spaces**, "2⁷ years of Algebra at Sofia University", Department of Algebra, FMI-SU, Gyulechica, April 13-15, 2018.
18. **On the universal optimality of the 600-cell: the Levenshtein framework lifted**, FMI Scientific Spring Session, 130 years Sofia University "St. Kliment Ohridski", FMI-SU, March 31, 2018.

19. **Refinements of Levenshtein bounds in q-ary Hamming spaces**, Spring 2018 semester program "Point Computational Experimental Research in Mathematics (ICERM)", Brown University, Providence, USA, March 22, 2018.
20. **Refinements of Levenshtein bounds in q-ary Hamming spaces**, Annual Workshop on Coding Theory and Applications „Prof. Stefan Dodunekov“, Troyan (Chiflick village), Bulgaria, 30.11.2017 - 03.12.2017.
21. **Bounding energies and cardinalities of spherical codes with inner products in a prescribed interval**, Optimal Point Configurations and Orthogonal Polynomials 2017, April 19-22, 2017, CIEM, Castro Urdiales, Cantabria, Spain.
22. **Computing energy bounds for spherical codes**, Annual Workshop on Coding Theory and Applications „Prof. Stefan Dodunekov, Tryavna, Bulgaria, November 10 - 13, 2016.
23. **New nonexistence results for binary orthogonal arrays**, 15th International Workshop on Algebraic and Combinatorial Coding Theory, ACCT - 15, Albena, Bulgaria, June 18-24, 2016.
24. **Energy bounds for antipodal codes on S^{n-1}** , 12th International Conference on Approximation and Optimization in the Caribbean, AppOpt 2016, June 5-10, 2016, Havana, Cuba, 2016.
25. **Levenshtein – type Bound on Maximal Codes**, International Workshop "Groups and Rings – Theory and Applications", GRiTA 2015, Sofia, Bulgaria, July 15-22, 2015.
26. **Linear programming bounds for the mesh ratio of spherical designs**, International Congress on Mathematics, MICOM 2015, Athens, Greece, September 22 – 26, 2015.
27. **Universal Lower Bound on Energy of Codes in S^{n-1} and $H(n,q)$ - Computational Aspects**, 2015 Workshop on Combinatorics and Applications at SJTU, Track A : Spherical Design and Numerical Analysis , Shanghai Jiao Tong University, Shanghai, China, April 21-27, 2015.
28. **Universal Lower Bounds on Energy – Computational Aspects**, Colloquium - Department of Mathematical Sciences, IPFW, Fort Wayne, IN, USA, Department of Mathematical Sciences, IPFW, Fort Wayne, IN, USA, March 18, 2015.
29. **Minimizing Energy - Computational Aspects**, Minimal Energy Workshop at Vanderbilt University in Nashville, TN, USA, Vanderbilt University, Nashville, TN, USA, March 12-15, 2015.
30. **Bounds on Energy of Spherical Codes**, Annual Workshop on Coding Theory and Applications „Prof. Stefan Dodunekov“, Veliko Turnovo, Bulgaria, November 20 – 23, 2014.
31. **Computational algorithms for bounding potential energy of spherical codes and designs**, Workshop on "Sphere Packings, Lattices, and Designs", Programme on "Minimal Energy Point Sets, Lattices, and Designs", September 29 - November 22, 2014, Vienna, Austria, October 27-31, 2014.
32. **On the Riesz energy of spherical designs**, Fourteenth International Workshop on Algebraic and Combinatorial Coding Theory, Svetlogorsk (Kaliningrad region), Russia, September 7–13, 2014, ACCT–14, <http://acct2014.iitp.ru/>.
33. **Подобрен метод за редуциране на възможните спектри на някои двоични ортогонални масиви**, Пролетна научна сесия на ФМИ, 29 Март 2014.
34. **Nonexistence of certain binary orthogonal arrays**, Annual Workshop on Coding Theory and Applications, Veliko Turnovo, Bulgaria, 21-24 November, 2013 (in Bulgarian).
35. **Nonexistence of certain binary orthogonal arrays**, Seventh International Workshop on Optimal Codes and Related Topics, Albena, Bulgaria, September 6-12, 2013.
36. **An improved algorithm for proving nonexistence of small spherical designs**, Thirteenth International Workshop on Algebraic and Combinatorial Coding Theory, Pomorie, Bulgaria, June 15-21, 2012, ACCT–13, <http://www.moi.math.bas.bg/acct2012/acct2012.html>.
37. **Подобрения на границите за мощността на някои класове сферични дизайни с нечетна сила**, Научна сесия на ФМИ, 24 Март 2012 г.
38. **Improvements of some bounds for spherical designs with odd strength and odd size**, Annual Workshop on Coding Theory and Applications, Gabrovo, Bulgaria, December 15-18, 2011.
39. **Подобрени методи за изследване на някои класове сферични дизайни**, Семинар на катедра Алгебра, ФМИ, 14 Декември 2011 г.

40. **Граници за скаларните произведения на някои сферични дизайни**, Семинар на катедра Алгебра, ФМИ, 1 Декември 2010 г.
41. **[On the structure of some spherical designs](#)**, International Congress in Honour of Professor H. M. Srivastava on his 70th Birth Anniversary at Uludag University, Bursa, Turkey, 18-21 August, 2010, <http://homepage.uludag.edu.tr/~srivastava/>.
42. **Improvements of some asymptotic bounds for spherical (2k-1)-designs**, MASSEE, International Congress on Mathematics MICOM 2009, Ohrid, Republic of Macedonia, September 16-20, 2009.
43. **New asymptotic bounds for some spherical (2k - 1)-designs**, Sixth International Workshop on Optimal Codes and Related Topics, Varna, Bulgaria, June 16-22, 2009, www.moi.math.bas.bg/oc2009/p9.pdf.
44. **Нова асимптотична долна граница за минималната възможна нечетна мощност на сферични (2k-1)-дизайни**, Пролетна научна сесия на ФМИ, 28 Март 2009.
45. **New asymptotic bound on the minimum possible odd cardinality of spherical (2k-1)-designs**, Annual Workshop on Coding Theory and Applications, Veliko Turnovo, Bulgaria, December 11-14, 2008.
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49. **Covering radius of spherical designs**, International Conference Pioneers of Bulgarian Mathematics, Sofia University "St. Kliment Ohridski", Faculty of Mathematics and Informatics, Sofia, Bulgaria, July 8-10, 2006.
50. **Bounds on the cardinality of spherical codes with inner products in given range**, Tenth International Workshop on Algebraic and Combinatorial Coding Theory, Zvenigorod, Russia, September 3-9, 2006, ACCT-10.
51. **Polynomial methods for bounding the covering radius of spherical designs**, Annual Workshop on Coding Theory and Applications, Bankya, Bulgaria, December 15-18, 2005.
52. **Upper bounds on the covering radius of spherical designs**, Fourth International Workshop on Optimal Codes and Related Topics, Pamporovo, Bulgaria, June 17-23, 2005.
53. **Some methods for investigation of spherical designs**, Ninth International Workshop on Algebraic and Combinatorial Coding Theory, Kranevo, Bulgaria, June 19-25, 2004, ACCT-9.
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