

Curriculum Vitae

Name: Vladimir N. Potapov

Date and place of birth: September 2, 1971, Novosibirsk, Russia

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Education

1988 – 1997: student, PhD student at Novosibirsk State University (NSU)

1992: B.Sc. in Applied Mathematics and Informatics. B.Sc. thesis title: “Fast lexicographic retrieval”

1994: M.Sc. in Mathematics. M.Sc. thesis title: “Tabulation of smooth functions”

1997: Ph.D. in Real and Functional Analysis. Advisor: Rafail Krichevskii. Ph.D. thesis title: “ ε -Entropy and tabulation of functional compacta”

Professional experience

1997 – present: Docent, Novosibirsk State University (NSU), Department of Mathematical Analysis at the Mechanics and Mathematics Division (part-time job)

2012 – 2014: Key project engineer, Huawei Technology, Moscow R&D

2021 – 2022: Team leader, Huawei Technology (part-time job)

1998 – 2012, 2014 – present: Senior research fellow, Sobolev Institute of Mathematics, Russian Academy of Science, Siberian Branch (SIM)

Areas of research

combinatorics, source coding, coding theory, cryptography, videocoding, cryptography, approximation theory, wavelet analysis, bioinformatics

Awards

Nomination for the most important annual results of SIM in
2001, 2003, 2006, 2011, 2012, 2016, 2020

Grants

1994 – 1995: International Science Foundation, NQ8000, NQ8300

2009 – 2013: Federal Target Grant “Scientific and educational personnel of innovation Russia” for 2009-2013 (government contract №02.740.11.0429, 14.740.11.0362)

1995 – 2015: Russian Foundation of Basic Research, 95-01-01343, 99-01-00531, 02-01-00939, 05-01-00364, 08-01-00671, 10-01-00424, 10-01-00616, 11-01-00997, 13-01-00463

2014 – present: Russian Science Foundation, 14-11-00555, 18-11-00136, 22-11-00266

Courses taught

Mathematical analysis, Functional Analysis, Linear algebra and geometry, Discrete Mathematics, Information theory at NSU (1995–2019); Perfect combinatorial structures in coding theory and cryptography at NSU (2015–2022) and the Summer student’s school “Modern Mathematics” (2011) and Moscow State University (2013)

Ph.D student

Taranenko A. A. (Ph.D. at Sobolev Institute of Mathematics, 2017). She got awards of All-Russian Möbius Contest (2015), Medal of the Russian Academy of Science for university students (2015), Kantorovich prize (2021)

Web pages

<http://math.nsc.ru/~potapov/>

<https://scholar.google.com/citations?user=0DynDV0AAAAJ&hl=en>

<https://mathscinet.ams.org/mathscinet/MRAuthorID/342859>

<http://orcid.org/0000-0001-9461-2064>

<http://www.researcherid.com/rid/A-1997-2011>

<https://www.scopus.com/authid/detail.url?authorId=7102561165>

https://www.researchgate.net/profile/Vladimir_Potapov2

https://arxiv.org/a/Potapov_V_1

Some recent publications

- Krotov D.S., Potapov V.N., Propelinear 1-perfect codes from quadratic functions, IEEE Trans. Inform. Theory, 2014. V. 60, N 4. P. 2065–2068.
DOI: 10.1109/TIT.2014.2303158
- Potapov V.N., Constructions of pairs of orthogonal latin cubes, Journal of Combinatorial Designs, 2020. V. 28 (8). P. 604–613. DOI: 10.1002/jcd.21718
- Potapov V.N., On q -ary bent and plateaued functions, Designs Codes Cryptography, 2020. V. 88(10), P. 2037–2049. DOI: 10.1007/s10623-020-00761-8
- Krotov D.S., Potapov V.N., On multifold packings of radius-1 balls in Hamming graphs, IEEE Trans. Inform. Theory, 2021, V. 67 (6), P. 3585–3598.
DOI: 10.1109/TIT.2020.3046260.