

S. Chobanyan
Research publications

Monographs

1. Probability Distributions in a Banach Space. (In Russian). Moskva: "Nauka". 368 p. R. 4.30 (1985).
2. Probability Distributions in Banach spaces. (Veroyatnostnye raspredeleniya v banakhovykh prostranstvakh). Moskva: "Nauka". 368 p. R. 4.30 (1985). Probability distributions on Banach spaces. Mathematics and Its Applications (Soviet Series), 14. Dordrecht etc.: D. Reidel Publishing Company. xxvi, 482 p. (1987) (co-authors: Vakhania N.N., Tarieladze V.I.).

Papers:

1. On a class of correlation functions of stationary random processes with values in a Banach space. Soobshch. Akad. Nauk Gruz. SSR, 55, 1969, 21-24.
2. On certain properties of positive operator measures in Banach spaces. Soobshch. Akad. Nauk Gruz. SSR, 57, 1970, 273-276.
3. Weakly stationary processes in a Banach space. Soobshch. Akad. Nauk Gruz. SSR, 57, 1970, 545-548 (co-author: Vakhania N.N.).
4. The regularity of stationary processes with values in a Banach spaces and the factorization of operator functions. Soobshch. Akad. Nauk Gruz. SSR, 61, 1971, 29-32.
5. On factorization of operator functions in correlation theory of stationary processes in a Banach space. Ph.D. Thesis, Tbilisi, 1971, 1-30.
6. On complete continuity of a covariance operator. Soobshch. Akad. Nauk Gruz. SSR, 70, 1973, 273-276 (co-author: Tarieladze V.I.).
7. Topological description of characteristic functionals of Gaussian distributions in L_p . Soobshch. Akad. Nauk Gruz. SSR, 72, 1973, 37-39.
8. Stationary processes in pseudo-hilbertian space. Bull. Acad. Pol. Sci., Sřr. Sci. Math. Astron. Phys. 21, 1973, 847-854 (co-author: Weron A.).
9. On characterization of Gaussian distributions in a Banach space. Materials of All-Union Symposium in Statistics of random processes, Kiev State University, Kiev, 1973, 208-211.
10. Some characterizations of Gaussian distributions in Banach space. Vychisl. Cent. Trudy ,13-14, 2, 1975, 80-116.
11. Banach-space-valued stationary processes and their linear prediction. Dissertationes Math., Warszawa, 125, 1975 (co-author: Weron A.).
12. On compactness of families of second-order measures in a Banach space. Theory Probab. Appl. 22, 1977, 805-810; translation from Teor. Veroyatn. Primen 22, 1977, 823-828 (co-authors: Nguen Zui Tien, Tarieladze V.I.). **(IF - იმფაქტ-ფაქტორი)**
13. Gaussian measures and the central limit theorem in a Banach space. Limit Theor. for Random Process., Akad. Nauk Ukr. SSR, Inst. Mat., 1977, 5-19 (co-authors: Vakhania N.N., Tarieladze V.I.).
14. On the characteristic functional of a Gaussian measure. Sov. Math., Dokl. 17, 1976, 296-299; translation from Dokl. Akad. Nauk SSSR 226, 1976, 1283-1286 (co-author: Tarieladze V.I.).
15. Gaussian characterizations of Certain Banach Spaces. J. Multivar. Anal. 7, 1977, 183-203 (co-author: Tarieladze V.I.). **(IF - იმფაქტ-ფაქტორი)**
16. Characterisation de certaines classes d'espaces de Banach par les mesures gaussiennes. Comptes Rendus Acad. Sci. Paris 285, 1977, 793-796 (co-authors: Chevet S., Linde W., Tarieladze V.). **(IF - იმფაქტ-ფაქტორი)**
17. Gaussian covariances in Banach sublattices of the space $L_0(T, \Sigma, \nu)$. Sov. Math., Dokl. 19, 1978, 885-888; translation from Dokl. Akad. Nauk SSSR 241, 1978, 528-531 (co-authors: Gorgadze Z.G., Tarieladze V.). **(IF - იმფაქტ-ფაქტორი)**
18. A counter-example concerning CLT in Banach spaces. Probab. Theory on Vector Spaces, Proc. Conf. Trzebieszowice 1977, Lect. Notes Math., 656, 1978, 25-30 (co-author: Tarieladze V.I.). **(IF - იმფაქტ-ფაქტორი)**

19. A certain probability characterization of summing operators. *Mat. Zametki*, 30, 1981, 133-142 (co-authors: Linde W., Tarieladze V.). **(IF - იმფაქტ-ფაქტორი)**
20. Characterization of certain classes of Banach spaces by properties of Gaussian measures. *Theory Probab. Appl.* 25, 1, 1981 (co-authors: Linde W., Tarieladze V.). **(IF - იმფაქტ-ფაქტორი)**
21. Existence of linear prediction for Banach space valued Gaussian processes. *J. Multivar. Anal.*, 11, 1981, 69-80 (co-author: Weron A.). **(IF - იმფაქტ-ფაქტორი)**
22. On the problem of best approximation in a space of vector-valued functions. *Sov. Math., Dokl.* 25, 1982, 565-568; translation from *Dokl. Akad. Nauk SSSR* 264, 1982, 24-26 (co-author: Vakhaniya N.N.). **(IF - იმფაქტ-ფაქტორი)**
23. The linear prediction and approximation of weak second order random elements. *Prediction theory and harmonic analysis: the Pesi Masani Volume*. p. 37-60, 1983 (co-author: Vakhania N.N.).
24. On the set of sums of a conditionally convergent series in a Banach space. *Soobshch. Akad. Nauk Gruz. SSR*, 110, 1983, 261-264.
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26. Convergence of Bernoulli series and the set of sums of a conditionally convergent series of functions. *Theory Probab. Appl.*, 28, 1984, 442-450. **(IF - იმფაქტ-ფაქტორი)**
27. The structure of the set of sums of a conditionally convergent series in a normed space. *Mat. Sb., N. Ser.* 128(170), No.1(9), 1985, 50-65.
28. Correlation theory of random elements in a Banach space. Thesis for the degree of Doctor of Science, Steklov Institute of Mathematics, Acad. Sci. USSR, (Sbornik: Mathematics) Moscow, 1985. **(IF - იმფაქტ-ფაქტორი)**
29. Structure of the set of sums of a conditionally convergent series in normed space. *Math. USSR, Sb.* 56, 1987, 49-62. **(IF - იმფაქტ-ფაქტორი)**
30. A problem on rearrangements of summands in normed spaces and Rademacher sums. *Probability theory on vector spaces IV, Proc. Conf., Lancut/Poland 1987, Lect. Notes Math.* 1391, 1989, 33-46 (co-author: Giorgobiani G.J.). **(IF - იმფაქტ-ფაქტორი)**
31. Almost sure permutational convergence of vector random series and Kolmogorov's problem. *New trends in probability and statistics. Vol. 1, Proc. 23rd Bakuriani Colloq. in Honour of Yu.V. Prokhorov, Bakuriani/USSR 1990, 93-105 (1991) (co-author: Giorgobiani G.J.)*
32. Convergence a.s. of rearranged random series in Banach space and associated inequalities. Hoffmann-Jorgensen, Jorgen (ed.) et al., *Probability in Banach spaces, 9: Proceedings from the 9th international conference on probability in Banach spaces, held at Sandbjerg, Denmark, August 16-21, 1993. Boston, MA: Birkhauser. Prog. Probab.* 35, 3-29 (1994). **(IF - იმფაქტ-ფაქტორი)**
33. Some remarks on the Menshov-Rademacher functional. *Math. Notes*, 59, 5, 1996, 571-574; translation from *Mat. Zametki*, 59, 5, 1996, 787-790. **(IF - იმფაქტ-ფაქტორი)**
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36. 14 explanatory (encyclopedia) papers in: *Probability and Mathematical Statistics, Encyclopedia: BRE, Moscow, 1999. Bernoulli random variable, Central Limit Theorem in a Banach space (with V. Tarieladze), Cylindrical sigma algebra, Flatly concentrated family of random variables, Measurable group, Measurable vector space, Kolmogorov inequality (with V. Kruglov), Kolmogorov three series theorem, Law of iterated logarithm in a Banach space, Probability measure on a group (with V. Tarieladze), Rademacher sequence, Radon-Nykodim property, Sign-invariant family of random variables, Vector measure.*
37. Exact maximal inequalities for exchangeable systems of random variables. *Theory Probab. Appl.* 45, .3, 424-435, 2000; translation from *Teor. Veroyatn. Primen.*, 45, .3, 555-567, 2000 (co-author: Salehi H.). **(IF - იმფაქტ-ფაქტორი)**

38. A maximal inequality for exchangeable systems of random variables. Korolyuk, V. (ed.) et al., Skorokhod's ideas in probability theory. Kyov: Institute of Mathematics of NAS of Ukraine. Proc. Inst. Math. Natl. Acad. Sci. Ukr., Math. Appl., 32, 2000, 119-125 (co-author: Salehi H.).
39. On Kolmogorov SLLN under rearrangements for "orthogonal" random variables in a B -space. J. Theor. Probab., 13, 1, 2000, 135-139 (co-author: Mandrekar Vidyadhar). (IF - იმფაქტ-ფაქტორი)
40. On the tail estimation of the norm of Rademacher sums. Georgian Math. J., 8, 2, 2001, 237-244 (co-author: Salehi H.). (IF - იმფაქტ-ფაქტორი)
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42. Strong law of large numbers under a general moment condition. Electronic Communications in Prob., 10, 2005, 218-222 (co-authors: Levental S., Salehi, H.). (IF - იმფაქტ-ფაქტორი)
43. On the constant in Menshov-Rademacher Inequality. J. Inequalities and Applications, v.2006(2006), Article ID 68969, 7 pages (co-authors: Levental S., Salehi, H.). (IF - იმფაქტ-ფაქტორი)
44. Some applications of transference lemma to compact vector summation. Bull. Georgian Nat. Acad. Sci. (co-authors: A.L. Chobanyan, V. Mandrekar, M.W. Mutka). 174, 2, 2006, 220-224.
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46. Towards Nikishin's theorem on the almost sure convergence of rearrangements of functional series. Functional Analysis and Applications, 45, 1, p. 33-45, (2011). (co-authors: S.Levental, V.Mandrekar). (IF - იმფაქტ-ფაქტორი)
47. Equivalence of convergence for almost all signs and almost all permutations of a functional series (co-authors: S.Levental, V.Mandrekar.) Bull. Georgian Nat. Acad. Sci. 174,2, 2009.
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50. S. Chobanyan, G. Giorgobiani, V. Tarieladze. Signs and Permutations: Two Problems of the Function Theory. Proc. A. Razmadze Mathematical Institute. 160 (2012), 24-34.
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52. S. Chobanyan, S. Levental. The contraction principle for tail probabilities of sums of exchangeable random variables with multipliers, Statistics and Probability Letters, vol. 83(7), p. 1720-1724. 2013. (IF - იმფაქტ-ფაქტორი)
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57. Maximum inequalities in rearrangements of orthogonal series. Georgian Mathematical Journal, vol. 29, no. 6, 2022, pp. 823-831. <https://doi.org/10.1515/gmj-2022-2181> (coauthor: S. Levental) (IF - იმფაქტ-ფაქტორი)
58. Permutations, Signs and Sum Ranges. Axioms 2023, 12(8), 760; <https://doi.org/10.3390/axioms12080760> (coauthors: Xabier Domonguez, Vaja Tarieladze, Ricardo Vidal) (IF - იმფაქტ-ფაქტორი).
59. An algorithm for finding a near-optimal rearrangement in the Steinitz functional. An Algorithm for Finding a Near-Optimal Rearrangement in the Steinitz Functional. Bulletin of TICMI. Vol. 27, No. 1, 2023, 21–27. (coauthors: L. Chobanyan, Z. Gorgadze, G. Ghlonti). (SJR) http://www.viam.science.tsu.ge/others/ticmi/blt/vol27_1/3.pdf
60. Trigonometric series and the permutation sign convergence condition. (In print Analysis Mathematica, 2024). (coauthors: G. Chelidze, G. Giorgobiani, V. Tarieladze) (IF - იმფაქტ-ფაქტორი).