

 <p>THE UNIVERSITY OF AUCKLAND NEW ZEALAND Te Whare Wānanga o Tāmaki Makaurau</p>	<p>University of Auckland Standard ACADEMIC CV</p>
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NAME: Arkadii Slinko

CURRENT POSITION: Senior Lecturer

DEPARTMENT: Mathematics

FACULTY: Science

EDUCATIONAL QUALIFICATIONS:

- Ph.D., Sobolev Institute of Mathematics, Novosibirsk, 1973
- Diploma of Novosibirsk State University, 1970

PREVIOUS AND OTHER APPOINTMENTS:

- The Centre for Interuniversity Research in Qualitative Economics (CIREQ) and Department of Economics of The University of Montreal
Visiting Researcher, autumn semester 2006.
 - Bilkent University (Ankara)
Visiting Professor, autumn semester 2001.
 - Boğaziçi University (Istanbul)
Visiting Professor, spring semester 1999.
 - The University of Auckland
Lecturer, 1992–1994;
Senior Lecturer, 1995–present.
 - Moscow Lomonosov State University
Associate Professor, 1989–1992.
 - Institute for System Studies of Academy of Sciences USSR (Moscow)
Senior Researcher, 1979–1992.
 - Moscow Pedagogical University
Associate Professor, 1979–1989.
 - Novosibirsk State University
Vice Chairman, Department of Mathematics, 1977–1979.
Associate Professor, 1976–1979.
Assistant Professor, 1975–1976.
 - Institute of Mathematics (Novosibirsk)
Junior researcher, 1973–1975.
PhD student, 1970–1973.
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SIGNIFICANT DISTINCTIONS / AWARDS:

- Faculty of Science Teaching Excellence Award (2007)
 - The European Commission Directorate General Research. The Sixth Framework Programme. - Appointment as independent expert (2003–2006).
 - 'The Other Olympiad', Interview. Documentary NZ TVOne, 2005-11-04 (repeated in 2007).
 - Christmas bonus of \$5000 for achievements during the year (2005)
 - Medal of Latvian Mathematical Society (2000).
 - Consultant of Ministry of Education of Taiwan (1998).
 - Invited Chair of the Problem Selection Committee of the 38th International Mathematics Olympiad in Argentina (1997)
 - D.Sc., Sobolev Institute of Mathematics of Academy of Sciences USSR (1990).
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RESEARCH SPECIALITIES / CAREER:

Summary Statement:Over the years my research interests have been:

- Mathematical Economics and, in particular, Social Choice Theory, Decision Theory and mathematical theories of allocation of discrete resources (current);
- Cluster analysis and applications;
- Design of experiments and random matrices;
- Lie and Jordan algebras and coalgebras, contemporary algebraic structures;
- Topological algebras;
- Computability in algebraic structures;
- Mathematics education of gifted students and mathematics (current). competitions (current)

RESEARCH GRANTS / FUNDING:

Auckland University Research Grants:

- \$8,504 NZD – Faculty of Business and Economics Research Development Fund Grant Reasoning and Decision-Making Under Uncertainty. (with Matthew Ryan), 2008.
- \$8,000 NZD – Faculty of Science Research Development Fund Grant In a search of a consensus: mechanisms and complexity, 2007.
- Simple Games, AURC, 2006.
- Additive representation of preferences on Cartesian products, AURC, 2004
- Algorithmic simplicity as normative requirement in mechanism design, AURC, 2003-2004.
- Exploratory Data Analysis of major social choice functions, AURC, 2002–03.
- Asymptotic properties of Social Choice Rules, AURC, 2000–02.
- Computable Algebraic Structures and Isomorphisms, AURC, 1997–98.
- Algebraic Testing Theory, AURC, 1996–97
- Training Programme for New Zealand Math Olympiad Team, AURC, 1995.
- Lie coalgebras, AURC, 1994–95.
- Nonassociative Banach Algebras, AURC, 1993–94.

External Grants and Fellowships:

- \$11,500 AUD Economic Design Network (ARC): grant in support for for the organisation of IV Pan-Pacific Game Theory Conference, 2008.

- \$5,000 AUD Economic Design Network (ARC): grant in support for a visit of Prof. M. Kaneko (University of Tsukuba, Japan), 2007.
- \$2,666 NZD ISAT Collaboration Fund of The Royal Society of New Zealand: grant for a visit of Prof. M. Agastya (Australian Research Fellow (ARC) and University of Sydney), 2006.
- \$4,800 AUD Economic Design Network (ARC): grant in support for a visit of Prof. W. Bossert (University of Montreal).
- ISAT Collaboration Fund of The Royal Society of New Zealand: grant for inviting of Dr. M. Agastya (University of Sydney), 2006
- \$3500 AUD – Economic Design Network: grant in support for visit of Prof. W. Bossert (University of Montreal), 2006
- \$5000 NZD – New Zealand Institute of Mathematics: small grant in support for visit of Prof. W. Bossert (University of Montreal), 2004
- \$5000 – New Zealand Institute of Mathematics: small grant in support for visit of Prof. H. Moulin (Rice University), 2003
- \$1000 USD – Center for Economic Design: travel grant for attending the inaugural conference of Society for Economic Design, June, 2000, Istanbul, Turkey.
- Research fellowship in NATO PC B Programme for visiting TUBITAK (Turkish Academy of Sciences) in the spring semester, 1999.
- University Autonoma de Barcelona, November, 1999, short visit.
- Research Fellowship of the Research Committee of the University of Zaragoza (Spain). Oct.-Nov. 1999.

INVITED LECTURES / CONFERENCES:

- (Invitation only, fully funded) Workshop Logic and Economics, Univ. of Tsukuba, Japan, August 26, 2008.
- Colloquium lecture, University of Karlsruhe, Germany, July 8, 2008.
- The Tenth International Symposium on Artificial Intelligence and Mathematics (ISAIM 2008) Fort Lauderdale, Florida, January 2-4, 2008.
- The 5th International Symposium on Imprecise Probability: Theories and Applications (ISIPTA 07), Prague, Czech Republic, 16–19 July 2007, 67–76.
- Dagstuhl Seminar 07431 ‘Computational Issues in Social Choice’, Dagstuhl, Germany, 21-26 October, 2007
- 2007 Joint Conference in Game Theory and Decentralization, Taipei, Taiwan, 19-22 October, 2007
- VIII International Meeting of the Society for Social Choice and Welfare, Istanbul, July 13-17, 2006.
- 1st International Workshop on Computational Social Choice, Amsterdam, 6–8 December, 2006.
- 2nd Pan-Pacific Conference on Game Theory, Taipei, November 24-26, 2005.
- 25th Australasian Economic Theory Workshop, Auckland (New Zealand), 23–24 February, 2005.
- Logic, Game Theory and Social Choice 4, Caen (France), June 22–24, 2005.
- Fourth International Symposium on Imprecise Probabilities and Their Applications, Pittsburg (USA), 20–23 July, 2005.
- Workshop on Game Theory and Social Choice: Auckland 5-6 February, 2004.
- International Conference “Mathematical Modelling of Social and Economical Dynamics” (MMSED-2004), Moscow, June 2004.
- The Seventh International Meeting of the Society for Social Choice and Welfare, Osaka, July 2004.
- 2004 Workshop on Economic Decisions, Pamplona (Spain), June, 2004.
- One Day Symposium in Honour of David Gault, Auckland, 10 December 2004.

- Colloquium lecture, Central Institute for Mathematics and Economics of Russian Academy of Sciences, 2003
 - Colloquium lecture, The University of Caen, Caen, France, 2003.
 - Invited lecture “Rankings of Multisets and Their Applications in Economics” at L’cole des Hautes Etudes en Sciences Sociales (EHESS), Centre d’analyse et de mathematique sociales (CAMS), Paris, France, 16 June 2003
 - II International Conference of the Society for Economic Design (SED 2002), New York, (2002).
 - VI International Conference of the Society for Social Choice and Welfare, Caltech, Pasadena, (2002).
 - Coding Theory and Data Integrity. Workshop on Coding and Cryptography. Singapore, September, (2001).
 - Equilibria, Matchings, Mechanisms. Mathematical Theories of allocation of Discrete Resources. NATO Advanced Research Workshop. Istanbul, December, (2001).
 - SED2000. Inaugural Conference for the Society for Economic Design Istanbul, Turkey, (2000).
 - V International Meeting of the Society for Social Choice and Welfare, Alicante, Spain, (2000).
 - International Algebraic Seminar in honour of 70th anniversary of the Chair of Higher Algebra of Moscow State University, Moscow, (1999)
 - XXII Bosphorus Workshop on Economic Design, Istanbul, (1999)
 - 1999 SAET (Society for the Advancement of Economic Theory) Conference, Rhodes, Greece, (1999)
 - Twelfth World Congress of the International Economic Association, Buenos Aires, Argentina, (1999)
 - 15 Victoria Algebraic Conference, Melbourne, Australia, (1997)
 - International Algebraic Conference “Malcev’s Readings,” Novosibirsk, Russia, (1997)
 - International Conference “Jordan algebras”, Oberwolfach, Germany, (1996, 1992)
 - New Zealand Mathematics Colloquium, Hamilton, (1994)
 - 20th Australasian Conference on Combinatorial Mathematics and Combinatorial Computing, Auckland, (1994)
 - III International Conference “Nonassociative algebras and their applications,” Oviedo, Spain, (1993)
 - 11 Victoria Algebraic Conference, Melbourne, Australia, (1993)
 - New Zealand Mathematics Colloquium, Christchurch, (1993)
 - International Conference on Theory of Radicals, Szekszárd, Hungary, (1991)
 - International Algebraic Conference in Honour of A.I.Shirshov, Barnaul, Russia, (1991).
 - International Algebraic Conference in Honour of A.I.Malcev, Novosibirsk, Russia, (1989)
 - Republican (Moldavian) Conference on Topological algebra, Tiraspol (1984,1988)
 - International Topological Conference, Baku (1987)
 - Republican (Estonian) Conference ” Theoretical and Applied Questions of Mathematics”, Tartu (1985)
 - All-Union (USSR) Symposium on Group Theory, Moscow (1984)
 - All-Union Conference on Design and Automatization of Experiments in Scientific Researches, Moscow (1983)
 - All-Union (USSR) Symposium on the Theory of Rings, Algebras and Modules: Kishinev (1974), Kishinev (1980), Novosibirsk (1982)
 - All-Union (USSR) Algebraic Conferences: Novosibirsk (1969), Kishinev (1971), Gomel (1975), Novosibirsk (1977), Krasnojarsk (1979), Minsk (1983), Kishinev (1985), L’vov (1987)
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TEACHING:

- Discrete Geometry (MATHS 782) (2008)
 - Number Theory (MATHS 714) (2007)
 - Lie Groups and Algebras (MATHS 783) (2007)
 - Algebra and Applications (MATHS 328) (Auckland University, 2006, 2007, 2008)
 - Mathematics for Data Communication (MATH 328) (Auckland University, 2002, 2004, 2005)
 - Advancing Mathematics 2 (MATHS 250) (Auckland University, 2004, 2005, 2008)
 - Mathematics 5 (MATH 253) (Auckland University: 2001, 2003, 2004, 2008)
 - Advanced Mathematics 2 (26.132, 445.230, MATHS 230) (Auckland University: 1995, 1997, 2003)
 - Advanced Mathematics 1 (MATH 130) (Auckland University: 2002)
 - Applied Discrete Algebra (445.381) (Auckland University, 1998, 2000, 2001)
 - Discrete Structures in Mathematics and Computer Science (415.225) (Auckland University: 2000)
 - Fixed Point Theorems with Applications to Economics Theory (graduate course) (Boğaziçi University, 1999)
 - Advanced Mathematics 3 (445.231) (Auckland University, 1996–98)
 - Mathematics 6 (445.252) (Auckland University, 1996–98)
 - Lie groups and algebras (graduate course) (Auckland University, 1995,1998)
 - Graduate Algebra 2: Rings, modules, algebras and representations. (Auckland University, 1998)
 - Mathematics for social sciences (Segments of 26.210 and 445.210) (Auckland University: 1993, 19994, 1998)
 - Mathematics 5 (26.251) (Auckland University: 1995)
 - Mathematics 4 (26.152) (Auckland University, 1994)
 - Linear Algebra (26.222) (Auckland University, 1993)
 - Elements of Field Theory and Galois Theory (26.420) (Auckland University, 1993–1994)
 - Higher Mathematics for gifted secondary school-students (Moscow Lomonosov State University, Kolmogorov High School, 1989–1992)
 - Graduate Algebra (Moscow State Pedagogical University, 1987-1989)
 - Undergraduate Algebra (Moscow State Pedagogical University: 1979-1986)
 - Nonassociative Rings and Algebras (special course for Ph.D. students) (Novosibirsk State University, 1977–1979)
 - Ring Theory (Novosibirsk State University, 1976)
 - Elements of Field Theory and Galois Theory (Novosibirsk State University: 1975, 1977, 1979)
 - Finite Fields and their Applications to Algebraic Coding Theory (Novosibirsk State University: 1978; Moscow State Pedagogical University, 1981, 1983)
 - Linear Algebra (Novosibirsk State University: 1975–1979)
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RESEARCH PUBLICATIONS:

Books, refereed journal articles and articles in refereed conference proceedings:

1. Approximability of Dodgson's rule (with John McCabe-Dansted and Geoffrey Pritchard), *Social Choice and Welfare*, 2008, 31(2): 311–330. Springer online (2007) DOI: 10.1007/s00355-007-0282-8.
2. Self-Selective Social Choice Functions (with S. Koray), *Social Choice and Welfare*, 2008, 31(1): 129–149. Springer online (2007) DOI: 10.1007/s00355-007-0276-6.
3. Orders on Multisets and Discrete Cones (with Marston Conder and Simon Marshall), *Order*, 2007, 24(4): 277–296. Springer online (2007) DOI: 10.1007/s11083-007-9073-1.
4. Flippable Pairs and Subset Comparisons in Comparative Probability Orderings (with Robin Christian and Marston Conder), *Order*, 2007, 24(3): 193–213. Springer online (2007) DOI: 10.1007/s11083-007-9068-y
5. Comparative Probability Orders and the Flip Relation (with M. Conder and D. Searles), *Proceedings of The 5th International Symposium on Imprecise Probability: Theories and Applications (ISIPTA 07)*, Prague, Czech Republic, 2007, 67–76.
6. Ranking Committees, Income Streams or Multisets (with M. Sertel), *Economic Theory*, 2007, 30(2): 265–287. Springer online: (2005) <http://dx.doi.org/10.1007/s00199-005-0054-6>.
7. On Complexity of Lobbying in Multiple Referenda (with Robin Christian, Mike Fellows and Fran Rosamond), *Review of Economic Design*, 2007, 11(3): 217–224. Springer online (2007) DOI: 10.1007/s10058-007-0028-1
8. How the Size of a Coalition Affects its Chances to Influence an Election, *Social Choice and Welfare*, 2006, 26(1): 143–153. Springer online: (2005) <http://dx.doi.org/10.1007/s00355-005-0052-4>.
9. Exploratory Analysis of Similarities between Common Social Choice Rules (with J. McCabe-Dansted), *Decision and Negotiation*, 2006, 15(1), 77–107. Springer online (2005): <http://dx.doi.org/10.1007/s10726-005-9007-5>.
10. On the Average Minimum Size of Manipulating Coalition (with G. Pritchard), *Social Choice and Welfare*, 2006, 27(2), 263–277. Springer online: (2006) <http://dx.doi.org/10.1007/s00355-006-0130-2>.
11. Relative Uncertainty Aversion and Additively Representable Set Rankings (with W. Bossert), *International Journal of Economic Theory*, 2006, 2: 105–122. Springer online: (2006) <http://dx.doi.org/10.1111/j.1742-7363.2006.00026.x>.
12. On Complexity of Lobbying in Multiple Referenda (with Robin Christian, Mike Fellows and Frances Rosamond), *Proceedings of the 1st International Workshop on Computational Social Choice (COMSOC–2006)*. Eds. Ulle Endriss and Jérôme Lang. Universiteit van Amsterdam, 2006, 87–96. <http://staff.science.uva.nl/ulle/COMSOC-2006/comsoc2006.pdf>
13. Approximability of Dodgson's Rule (with John McCabe Dansted and Geoff Pritchard), *Proceedings of the 1st International Workshop on Computational Social Choice (COMSOC–2006)*. Eds. Ulle Endriss and Jérôme Lang. Universiteit van Amsterdam, 2006, 331– 344. <http://staff.science.uva.nl/ulle/COMSOC-2006/comsoc2006.pdf>
14. Answers to Two Questions of Fishburn on Subset Comparisons in Comparative Probability Orderings (with R. Christian), *Proceedings of The 4th International Symposium on Imprecise Probabilities and Their Applications (ISIPTA 05)*, Pittsburg, Pennsylvania, 2005, 117–124.
15. *Self-Selective Social Choice Functions* (with S. Koray), 2nd Pan-Pacific Conference on Game Theory, Taipei, 24–26 November, 2005, <http://140.109.121.114/2ndconference/Duality18.pdf>
16. How Large Should a Coalition Be to Manipulate an Election? *Mathematical Social Sciences*, 2004, 47(3): 289–293.
17. Comparing the rules Chamberlin's way (with Geoff Pritchard), *Proceedings of the International Conference "Mathematical Modelling of Social and Economical Dynamics" (MMSED-2004)*, Moscow, 2004, pp. 337–340.
18. 1, 2, 4, 8, What comes next? *Extracta Mathematicae*, 2004, 19:155–161.
19. A Counterexample to Fishburn's Conjecture on Finite Linear Qualitative Probability (with Marston Conder), *Journal of Mathematical Psychology*, 2004, 48(6), 425–431.

20. Exploratory data Analysis of Common Social Choice Functions (with W. Leung). II International Conference on the Problems of Control (17-19 June, 2003), Vol.1, 224–228, Moscow, December, 2003.
21. Degree Spectra and Computable Dimension in Algebraic Structures (with D.R. Hirschfeldt, B. Khoussainov, R.A. Shore), *Annals Pure and Applied Logic*, 2002, 115: 71–113.
22. The Asymptotic Strategy-proofness of the Plurality and the Run-off Rules, *Social Choice and Welfare*, 2002, 19, 313–324.
23. The Majoritarian Compromise in Large Societies, *Review of Economics Design*, 2002, 7(3): 343–350.
24. On Asymptotic Strategy-Proofness of Classical Social Choice Rules, *Theory and Decision*, 2002, 52: 389–398.
25. A generalization of Komlos's Theorem on Random Matrices, *NZ Journal of Math.*, 2001, 30, 81–86.
26. Computable Rings, Groups and Their Isomorphisms. In: "Nonassociative Algebra and Its Applications," Eds. R.Costa etc., Marcel Dekker, NY, 2000, pp. 397–416. (with B.Khoussainov).
27. Mathematics Olympiads for School Students of 10th form (Russian), *Prosveschenie*, Moscow, 1998, 256 pp (with Kuptzov, V., Nesterenko, Yu., Reznichenko, S.).
28. Computable Rings and Their Isomorphisms. *New Zealand J. Math*, 1999, 21, 47–63. (with B. Khoussainov).
29. Mathematics Olympiads for School Students of 11th form (Russian), *Prosveschenie*, Moscow, 1999, 254 pp (with Kuptzov, V., Nesterenko, Yu., Reznichenko, S.).
30. Linearly compact algebraic Lie algebras and Coalgebraic Lie coalgebras. *Proc. Amer. Math. Soc.*, 1997, 125, no.7, 1945–1952 (with B. Cuatrero and J. Gale).
31. USSR Mathematical Olympiads. 1989–1992. Australian Mathematics Trust, Canberra, 1997, 136 pp.
32. Mathematics Olympiads for School Students of 9th form (Russian), *Prosveschenie*, Moscow, 1997, 208 pp (with Kuptzov, V., Nesterenko, Yu., Reznichenko, S.).
33. Local structure of linearly compact algebras and local finiteness of coalgebras. *Proceeding of Tainan-Moscow Algebra Workshop (Tainan, 1994)*, pp. 307–316. Walter de Gruyter, Berlin, 1996.
34. Linearly compact algebras and coalgebras. *New Zealand J. Math*, 1996, 25, 95–104.
35. Local finiteness of coalgebraic Lie algebras. *Communications in Algebra*, 1995, 23(3), 1165–1170.
36. Extending the norm from Jordan-Banach algebras of hermitian elements to their associative envelopes. *Communications in Algebra*, 1994, 22(4), 1435-1455 (with A.Rodriguez Palacios and E.I.Zelmanov).
37. Bounded degree of weakly algebraic topological Lie algebras. *Manuscripta Mathematica*, 1993, Vol.81, pp. 129–139 (with B. Cuartero, J. Gale and A. Rodriguez Palacios).
38. The radical of locally compact alternative and Jordan rings, *Theory of Radicals (Proc. Conf. Szekszárd, 1991)*, pp. 249–262. *Colloq. Math. Soc. J. Bolyai*, 61, North-Holland, Amsterdam, 1993.
39. Absolute prime numbers. *James Cook Math. Notes*, 1993, Vol.6, Iss.60, pp. 6184–6191.
40. Compact Lie rings. *Communications in algebra*, 20(1992), No. 2, p.387–408.
41. Enumeration of pairs and Kuznetsov's derivative. *James Cook Math. Notes*, 1992, Vol.6, Iss.57, pp. 6102–6106.
42. Design of experiment for screening significant variables in the linear model (Russian). *Kibernetika*, 1991, No. 3, p. 91–97.
43. Democracy from the point of view of mathematics (Lettish). *Zvaigzhnota Debess* 125(1989), Rudens, p.30–35. English translation: *James Cook Math. Notes*, Vol.6, No.55 (1991).
44. Structure and representations of nonassociative topological rings (Russian). Dissertation for a Doctor's degree, Sobolev Institute of Mathematics, Novosibirsk, 1990.
45. On complete metric Jordan algebras (Russian). *Mat. Zametki* 47(1990), No.5, p.100–105. English: *Math. Notes*, 47(1990), No. 5–6, 491–494.
46. A criterion for primeness for nondegenerate alternative and Jordan algebras (Russian). *Tr. Mosk. Mat. O-va* 50(1987), 130–137. English translation: *Trans. Moscow Math. Soc.*, 1988, pp.129–137 (with Beidar, K.I. and Mikhalev, A.V.).

47. Splitting of a compact ring into a sum of the radical and an inertial subring (Russian). *Algebra i Logika* 27(1988), No.3, 359–372. English translation: *Algebra Logic* 27(1988), No.3, 225–233.
48. Locally compact Jordan rings that are nearly division rings (Russian). *Mat. Zametki* 43(1988), No.6, p.713–724. English translation: *Math. Notes*, 43(1988), No.6, 409–415
49. Nonassociative topological bimodules (Russian). *Mat. Sb. Nov. Ser.* 133(175), 1987, No.2(6), 254–266. English translation: *Math. USSR Sbornik* 61(1988), No.1, 259–270.
50. Some algebraic and combinatorial aspects in design of screening experiments (Russian). In: *Statistical methods and models* (Russian). Institute for System Studies. Moscow, 1987, No.1, p.24–31 (with Illarionov, V.V.).
51. Algebraic rings with compact topology (Russian). *Algebra i Logika* 25(1986), No.1, 87–102. English transl: *Algebra and Logic* 25(1986), No.1, 58–68.
52. Structure of alternative and Jordan compact rings (Russian). *Mat. Sb. Nov. Ser.* 129(171), 1986, No.3, 378–385. English translation: *Math. USSR Sbornik* 57(1987), No.2, 391–398.
53. Modules and representations of nonassociative topological compact rings (Russian). *Mat. Zametki* 39(1986), No.6, 791–797.
54. The Kurosh problem for compact rings (Russian). *Dokl. Akad. Nauk SSSR* 288(1986), No.5, 1065–1067. English translation: *Soviet Math. Dokl.* 33(1986), No.3, 833–835.
55. Topological rings with involutions (Russian). *Uspehi Mat. Nauk* 41(1986), No.5(251), 197–198. English translation: *Russ. Math. Surv.* 41(1986), No.5, 167–168.
56. On locally compact alternative and Jordan rings (Russian). *Algebra i Logika* 25(1986), No.4, 436–444.
57. Some algebraic operations over classification algorithms and their applications (Russian). *Zh. Vychisl. Mat. i Mat. Fiz.* 25(1985), No.10, 1547–1555. English transl: *USSR Comput. Math. and Math. Phys.* 25(1986), No.5, 169–177.
58. The Kurosh problem in the class of compact rings (Russian). *Vestnik MGU. Ser.1. Mat i Meh.* 1985, No.5, p.87.
59. Operations over the classification algorithms and their application to the classification of dynamic objects (Russian). In: *Statistical models and methods* (Russian). Institute for System Studies. Moscow, 1984, No.1, p.83–93.
60. Defects of the matrices of designs of experiments (Russian). In: *Statistical models and methods* (Russian). Institute for System Studies. Moscow, 1984, No.1, p.93–102.
61. On compact nonassociative rings (Russian). *Algebra i Logika* 22(1983), No.3, 308–315. English translation: *Algebra and Logic* 22(1983), No.3, 222–228 (1984).
62. Rings that are nearly associative. Academic Press, New York - London, 1982, xi+371 pp. (with K.A. Zhevlakov, I.P. Shestakov, and A.I. Shirshov)
63. Nonassociative rings (Russian). *Algebra. Topology. Geometry* (Russian). Vol.18, 3–72. *Akad. Nauk SSSR. Vsesojuz. Inst. Nauchn. i Tehn. Informacii*, Moscow, 1981 (with Ju.A. Bahturin and I.P. Shestakov).
64. On special varieties of Jordan algebras (Russian). *Mat. Zametki* 26(1979), No.3, 337–344. English translation: *Math. notes* 26(1979), No.3–4, 661–665 (1980).
65. On the theory of Jordan algebras with the descending chain condition (Russian). *Uspehi Mat. Nauk.* 1980. No.2(212), p. 221–222. English translation: *Russian Math. Surveys* 35(1980), No.2, 259–260.
66. Jordan algebras (Russian). *Mathematical Encyclopedia* (Russian). Vol.2, Moscow 1979, p. 693–696. Rings that are nearly associative (Russian). *Izd-vo Nauka, Moskva*, 1978, 431 pp. (with K.A. Zhevlakov, I.P. Shestakov, and A.I. Shirshov).
67. The lower nilradical in Jordan algebras with a maximality condition (Russian). *Algebra i Logika* 16(1977), No.1, 98–100. English translation: *Algebra and Logic* 16(1977), No.1, 68–69 (1978).
68. Jordan algebras without nilpotent elements that satisfy finiteness conditions (Russian). In: *Rings and modules* (Russian), *Mat. Issled.* 38(1976), 170–176.
69. Jordan algebras (Russian). Lecture notes. Library of the Department of Algebra and Mathematical Logic of the Novosibirsk State University. No.15. Novosibirsk University, Novosibirsk, 1976, 100 pp. (with K.A. Zhevlakov, I.P. Shestakov, and A.I. Shirshov).

70. Alternative algebras. (Russian). Lecture notes. Library of the Department of Algebra and Mathematical Logic of the Novosibirsk State University. No.17. Novosibirsk University, Novosibirsk, 1976, 77 pp. (with K.A. Zhevlakov, I.P. Shestakov, and A.I. Shirshov).
71. Right representations of algebras (Russian). *Algebra i Logika* 13(1974), No.5, 544–588 . English translation: *Algebra i Logika* 13(1974), No.5, 312–333 (1975)(with Shestakov,I.P.).
72. Radicals of Jordan rings that are connected with alternative rings (Russian). *Mat. Zametki* 16(1974), 135–140.
73. The radicals of Jordan rings (Russian). *Algebra i Logika* 11(1972), No.2, 206–215. English translation: *Algebra and Logic* 11(1972), 121–126 (1973).
74. A remark on radicals and derivations of rings (Russian). *Sibirsk. Mat. Zh.* 13(1972), 1395–1397. English translation: *Siberian Math. J.* 13(1972), 984–986 (1973).
75. The Jacobson radical and absolute divisors of zero of special Jordan algebras (Russian). *Algebra i Logika* 11(1972), No.6, 711–723. English translation: *Algebra and Logic* 11 (1972), p. 396–402 (1973).
76. Konstantin Aleksandrovich Zhevlakov (Obituary notice) (Russian). *Mat. Zametki* 12(1972), No.3, 233–237 (with Shirshov, A.I.; Kargapolov, M.I; Bokut, L.A; Kuz'min, E.N; Shestakov, I.P.).
77. On the equivalence of certain nilpotences in right alternative rings (Russian). *Algebra i Logika* 9(1970), No.3, 342–348.
78. Algebraic operations on systems of objects (Russian). *Problemy Kibernet.* No.20(1968), 217–223. English transl: *Systems Theory Res.* 20(1971), 189–195.

Reports:

79. On the manipulability of proportional representation (with Shaun White) Report Series N.547. Department of Mathematics. The University of Auckland, February, 2006
80. Approximability of Dodgson's rule (with John McCabe-Dansted and Geoffrey Pritchard), Report Series N.551. Department of Mathematics. The University of Auckland, June, 2006
81. On the Manipulability of Proportional Representation (with S. White), The Centre for Interuniversity Research in Qualitative Economics (CIREQ), Cahier 12-2006. University of Montreal, 2006
<http://www.cireq.umontreal.ca/publications/12-2006-cah.pdf>
82. On Complexity of Lobbying in Multiple Referenda (with Robin Christian, Mike Fellows and Fran Rosamond), The Centre for Interuniversity Research in Qualitative Economics (CIREQ), Cahier 13-2006. University of Montreal, 2006
<http://www.cireq.umontreal.ca/publications/13-2006-cah.pdf>
83. Flippable Pairs and Subset Comparisons in Comparative Probability Orderings and Related Simple Games (with Robin Christian and Marston Conder), The Centre for Interuniversity Research in Qualitative Economics (CIREQ), Cahier 15-2006. University of Montreal, 2006
<http://www.cireq.umontreal.ca/publications/15-2006-cah.pdf>
84. Self-Selective Social Choice Functions (with Semih Koray), The Centre for Interuniversity Research in Qualitative Economics (CIREQ), Cahier 18-2006. University of Montreal, November, 2006
<http://www.cireq.umontreal.ca/publications/18-2006-cah.pdf>
85. On Complexity of Lobbying in Multiple Referenda (with R. Christian, M Fellows and F. Rosamond), Report Series N.534. Department of Mathematics. The University of Auckland, February, 2005
86. Relative Uncertainty Aversion and Additively Representable Set Rankings (with W. Bossert), The Centre for Interuniversity Research in Qualitative Economics (CIREQ), Cahier 16-2004. University of Montreal, 2004
87. Orders on Multisets and Discrete Cones (with Marston Conder and Simon Marshall), Report Series N.515. Department of Mathematics. The University of Auckland, April, 2004
88. Exploratory Analysis of Similarities between Common Social Choice Rules (joint with J. McCabe-Dansted), Report Series N.512. Department of Mathematics. The University of Auckland, March, 2004
89. On the Average Minimum Size of Manipulating Coalition (with Geoff Pritchard), Report Series N. 507. Department of Mathematics. The University of Auckland, September, 2003

90. A Counterexample to Fishburn's Conjecture (with Marston Conder), Report Series N.509. Department of Mathematics. The University of Auckland, December, 2003
91. Ranking Committees, Words or Multisets, Report Series N. 482. Department of Mathematics. The University of Auckland, June, 2002 (with Murat Sertel).
92. Ranking Committees, Words or Multisets, Nota di Laboro 50.2002. Center of Operation Research and Economics. The Fondazione Eni Enrico Mattei, Milan, 2002 (with Murat Sertel)
93. The Majoritarian Compromise in Large Societies, Report Series N. 483. Department of Mathematics. The University of Auckland, June, 2002
94. On Asymptotic Coalitional Strategy-Proofness of Social Choice Rules under the IAC Assumptoin, Report Series N. 484. Department of Mathematics. The University of Auckland, June, 2002
95. On π -Consistent Social Choice Functions, Report Series N. 461. Department of Mathematics. The University of Auckland, May, 2001 (joint with S. Koray).
96. A Generalization of Komlos Theorem on random matrices. Report Series N. 438. Department of Mathematics. The University of Auckland, January 2000.
97. On Asymptotic Strategy-Proofness of Classical Social Choice Rules, Report Series N. 458. Department of Mathematics. The University of Auckland, October 2000.
98. On Asymptotic Strategy-proofness of the Plurality and Run-off Rules. Preprint ISS/EC-99-01. Department of Economics. Boğaziçi University. Istanbul. 1999.
99. Asymptotic Strategy-proofness of the Plurality and Run-off Rules. Report Series N. 432. Department of Mathematics. The University of Auckland, December 1999.
100. The Majoritarian Compromise Is Asymptotically Strategy-Proof. Report Series N. 433. Department of Mathematics. The University of Auckland, December 1999.
101. Computable Rings and Their Isomorphisms, Report Series N. 386, Department of Mathematics, The University of Auckland, August 1997 (with B.Khoussainov).
102. Linearly compact algebraic Lie algebras and Coalgebraic Lie coalgebras. Report Series N. 316. Department of Mathematics. The University of Auckland, May 1995.
103. Linearly compact algebras and coalgebras. Report Series N. 318. Department of Mathematics. The University of Auckland, June 1995.

Publications about Mathematics Olympiads:

104. 38th International Mathematical Olympiad. PROBLEMS & SOLUTIONS. Shortlisted for consideration by the Jury. Mar-Del Plata - Buenos Aires, Argentina, July, 1997, 64 pp (with A.Barone, H.Muller, M.Kuchma,
105. 33d International Mathematical Olympiad. Problems and Solutions Shortlisted for Consideration by the Jury. Moscow, Russia, July, 1992, 34 pp. S.Savchev)
106. The Computer Tournament of The XXIIIth All-Union Mathematical Olympiad (Russian). Kvant, 1990, No.1, pp.75–76,79–80.
107. The Nineteenth All-Union Mathematical Olympiad (Russian). Matematika v shkole, 1985, No.6, p.48–54 (with Grishin, A.V.; Ponomarenko, A.S.).
108. The Eighteenth All-Union Mathematical Olympiad (Russian). Matematika v shkole, 1984, No.5, p.50–57 (with Ponomarenko, A.S.).
109. The Seventeenth All-Union Mathematical Olympiad. Kvant, 1983, No.11, p. 46–48 (with Reznichenko, S.V.).
110. The Fifteenth All-Union Mathematical Olympiad (Russian). Matematika v shkole, 1981, No.6, p.54–60 (with Nesterenko, Ju.V.; Savin, A.P.; Sarycheva, T.A.; Vavilov, V.V.).
111. Novosibirsk State University (Russian). Kvant, 1979, No.5, 47–49 (with Ilín, V.; Meledin, G.; Fokin, M.).

Miscellanea:

112. MMP distorted election outcome. The Dominion Post, Wellington, September 30, 2005, p. B5
113. Actualmente las matematicas son decisivas en las ciencias sociales (Spanish). La Nueva España, 31 de Enero de 1992, Oviedo, Viernes, p.61.
114. A review of the book O.Loos "Jordan Pairs" (Russian). Novye knigi za rubezhom A–12(1976), 9–10.