

Curriculum Vitae

Name: Michael Zakharyashev

Department & Address: Department of Computer Science and Information Systems,
Birkbeck, University of London, Malet Street, London WC1E 7HX, U.K.

Homepage: <http://www.dcs.bbk.ac.uk/~michael>

E-mail: michael@dcs.bbk.ac.uk

Title of Present Post: Professor of Computer Science

1 Education

- 1973–1978: BSc and MSc in Mathematics (Diploma with Honours), Faculty of Computational Mathematics and Cybernetics, Moscow State University.
- 1981–1984: PhD student at the Keldysh Institute for Applied Mathematics, Russian Academy of Sciences, Moscow.

Degrees:

- 1985: PhD in Mathematics, Novosibirsk State University.
- 1998: Habilitation (mathematical logic), Novosibirsk State University.

2 Academic appointments

- 2005–... Department of Computer Science and Information Systems, Birkbeck University of London, *Professor of Computer Science*.
- 2002–2005: Department of Computer Science, King's College London, *Professor of Logic and Computation*.
- 2000–2002: Department of Computer Science, King's College London, *senior lecturer*.
- 1999–2000: School of Computer Studies, University of Leeds, *lecturer*.
- 1993–1998: Faculty of Computational Mathematics and Cybernetics, Moscow State University, *associate professor*. (half-time)
- 1986–1993: Faculty of Computational Mathematics and Cybernetics, Moscow State University, *lecturer* (half-time).
- 1978–1999: Keldysh Institute for Applied Mathematics, Russian Academy of Sciences, Moscow, *research associate*, from 1985 *senior research associate*.

Academic visits and fellowships:

2009 Free University of Bozen-Bolzano: visiting professor.

2006 Universities of Bozen-Bolzano and Innsbruck: visiting professor.

2004 Japan Advanced Institute of Science and Technology (JAIST); visiting professor. A grant from the JSPS and the British Council.

1998–1999 Imperial College, London; visiting professor. An EPSRC grant.

1997 Freie Universität Berlin, Germany; Alexander von Humboldt Foundation fellowship.

1996–1997 Japan Advanced Institute of Science and Technology (JAIST); visiting associate professor.

1995–1996 Freie Universität Berlin, Germany; Alexander von Humboldt Foundation fellowship.

1993 University of Amsterdam, the Netherlands; financed by the University of Amsterdam.

1992 Hiroshima University, Japan; financed by the Japan Association for Mathematical Sciences.

3 Research

Awards:

2014 The 2014 Marco Cadoli Student Paper Prize, 14th International Conference on Principles of Knowledge Representation and Reasoning (KR), Vienna, 2014.

2011 Distinguished paper award at the 22nd International Joint Conference on Artificial Intelligence (IJCAI 2011), Barcelona.

2011 Best paper award, 5th International Conference on Web Reasoning and Rule Systems (RR 2011), Galway, Ireland.

2010 Ray Reiter best paper prize at the Twelfth International Conference on Principles of Knowledge Representation and Reasoning (KR 2010).

2008 Ray Reiter best paper prize at the Eleventh International Conference on Principles of Knowledge Representation and Reasoning (KR 2008).

2000 Best paper award at the Seventh International Conference on Principles of Knowledge Representation and Reasoning (KR 2000).

Funded projects and grants:

- 2010–2013: principal investigator of the UK EPSRC three year project EP/H05099X “Ex-ODA: Integrating Description Logics and Database Technologies for Expressive Ontology-Based Data Access” (grant value at Birkbeck £271,714).
- 2007–2010: principal investigator of the UK EPSRC three year project EP/E034942 “Computational Logic of Euclidean Spaces” (grant value £242,579).

- 2004–2007: *principal investigator* of the EPSRC grant GR/S61973/01 “Knowledge representation and reasoning about distances” (total grant value at King’s £196,021).
- 2004–2007: *principal investigator* of the U.K. EPSRC grant no. GR/S63175/01 “Dynamic ontologies: a framework for service descriptions” (total grant value at King’s £162,220).
- 2001–2004: EPSRC project “Analysis and Mechanisation of Decidable First-Order Temporal Logics” GR/R42474/01, principal investigator (total grant value £176028, one RA).
- 2001–2004: EPSRC project “Complexity analysis of reasoning in combined knowledge representation systems” GR/R45369/01, principal investigator (total grant value £65350, one PhD student).
- 2004: grant from the Japan Society for the Promotion of Science (JSPS) and the British Council in the framework of the “Invitation Program for British Professors” for visiting Japan in October–November 2004 (\approx £10,000).
- 1999–2001: Grant no. 99–01–0986 from the Russian Foundation for Basic Research “Temporal and modal logic in computer science and artificial intelligence,” principal investigator.
- 1998–1999: EPSRC project “Temporal and Dynamic Description Logics” GR/M36748, visiting professor at Imperial College London; the project proposal was mine.
- 1998–1999: European Commission INCO–Copernicus grant no. 977020 “Methods and Tools for Distributed Real Time Embedded Systems, Design and Analysis,” investigator.
- 1995–1997: Alexander von Humboldt Foundation research fellowship, Berlin, Germany.
- 1993, 1994–1995: Grants from the Soros Foundation.
- 1992–1998: Grants no. 01–00054, 01–16006, 96–01205 from the Russian Foundation for Basic Research.
- 1992: Grant from the Japan Association for Mathematical Sciences.

Invited lectures at international conferences, workshops and summer schools

- 2014** Lecturer at ESSLLI 2014, the 26th European Summer School in Logic, Language and Information, Tübingen, Germany.
- 2013** Invited course ‘Ontology-Based Data Access’ at the Reasoning Web Summer School in Mannheim, Germany.
- 2012** Invited speaker at ‘Logical Models of Reasoning and Computation 2012’ (Moscow).
- 2011** Invited lecture at IJCAI (Barcelona), best paper track.
- 2011** Invited speaker at WoLLiC (Philadelphia, USA).
- 2011** Lecturer at ESSLLI 2011, WoMo workshop (Ljubljana, Slovenia).
- 2010** Lecturer at the Summer School on Applied Modal Logic affiliated with Advances in Modal Logic 2010, Moscow.

- 2010** Lecturer at ESSLLI 2010, the 22nd European Summer School in Logic, Language and Information, Copenhagen, Denmark.
- 2010** Invited speaker at the workshop Algebra & Co-algebra meet Proof Theory, Imperial College London.
- 2009** Invited speaker at the 16th International Symposium on Temporal Representation and Reasoning (TIME), Brixen-Bressanone, Italy.
- 2008** Invited speaker at the Seventh International Conference Advances in Modal Logic (AiML), Nancy, France.
- 2008** Invited speaker at the British Logic Colloquium (BLC), Nottingham, UK.
- 2007** Invited speaker at the International Symposium on Frontiers of Combining Systems (FroCoS), Liverpool, UK.
- 2005** Invited speaker at the Sixth International Tbilisi Symposium on Language, Logic and Computation, Batumi, Georgia.
- 2005** Invited special session speaker at the Annual Conference of the Australian Mathematics Society.
- 2005** Lecturer at ESSLLI 2005, the 17th European Summer School in Logic, Language and Information, Heriot-Watt University, Edinburgh, Scotland.
- 2005** Invited speaker at “Trends in Logic III,” International Conference in memory of A. Mostowski, H. Rasiowa and C. Rauszer, Warsaw, Poland.
- 2004** Invited speaker at the XI Congress of Mathematics of Serbia and Montenegro.
- 2004** Invited speaker at the International Workshop “Negation in Constructive Logic”, TU Dresden, Germany.
- 2004** Invited speaker at the 38th MLG Meeting, October 2004, Gamagori, Japan.
- 2003** Invited speaker at the international conference on algebraic and topological methods in non-classical logics, Tbilisi, Georgia.
- 2001** Invited speaker at the International Joint Conference on Artificial Intelligence (IJCAI 2001), Seattle, USA (distinguished presentations track).
- 2001** Keynote speaker at the international workshop “First-order and fixpoint temporal logics”, Liverpool, U.K.
- 2001** Invited speaker at the international conference “Mathematical logic, algebra, and set theory,” Moscow, Russia.
- 2001** Invited speaker at the Eighth Workshop on Automated Reasoning: Bridging the Gap between Theory and Practice, University of York, U.K.
- 2001** Invited speaker at the fourth Tbilisi International Symposium on Language, Logic and Computation, Borjomi, Georgia.

- 2001** Keynote speaker at the International conference “Language, Logic, and Logistics: Modeling and Cross-Disciplinary Discourse,” New Mexico State University, USA.
- 2000** The 6th Barcelona Logic Meeting, Spain.
- 2000** International Symposium “Constructivism in Non-classical Logics and Computer Science,” Mantova, Italy.
- 2000** Lecturer at the European Summer School in Language, Logic and Information, ESSLLI’2000, Birmingham, England.
- 1997** International workshop “Intuitionistic Modal Logic,” Amsterdam.
- 1999–1997** International conferences on Mathematical Logic in Japan: Kyoto (1997), Sendai (1996), Kanazawa (1996), Niigata (1994).
- 1996** The Foundation of Logic, Language and Information (FOLLI) workshop in Chiba, Japan.
- 1992** The Association for Symbolic Logic European Summer Meeting (Logic Colloquium’92), Hungary.
- 1991** Banach Centre Semester, Warsaw, Poland.

Other activities:

- 2010–... Associate editor of the Artificial Intelligence Journal, Elsevier.
- 2001–... Editor of the Journal of Applied Logic.
- 2000–... treasurer of AiML.
- 2004–... Member of the EPSRC college.
- 1996–...: Associate editor of the journal “Studia Logica”.
- 1995: one of the founders of ‘Advances in Modal Logic’ <http://www.aiml.net>.

4 Teaching

Undergraduate courses:

- ‘Computer Science Logic,’ 2002–2005 (\approx 100 students in class).
- ‘System Architecture and Assembly Language Programming,’ 1999–2001 (\approx 200 students in class).
- ‘Introduction to Programming’ 1999–2000 (\approx 200 students in class)

MSc courses:

- ‘Fundamentals of Computing,’ since 2005 (\approx 80 students in class).
- ‘Semantic Web,’ since 2005 (\approx 20 students in class).

- ‘Knowledge Representation and Processing,’ 2000–2001 (\approx 15 students in class).

Before coming to the UK, I had been teaching for more than ten years in Russia and abroad.

Moscow State University:

- Undergraduate courses:
 - Mathematical logic and logic programming (\approx 100 students in class); the course was supported by an original system of teaching programs (for the language of first-order logic, resolution method, and PROLOG programming)
 - Discrete mathematics (\approx 15–20 students)
 - Introduction to recursion theory (\approx 15–20 students)
 - Elements of group theory (\approx 15–20 students)
 - Introduction to linear algebra (\approx 15–20 students)
- Graduate courses
 - Non-classical logic in computer science and artificial intelligence (\approx 10–15 students)
 - Logical methods of knowledge representation and reasoning
 - Automated theorem proving (\approx 10–15 students)
 - Combinatory logic and λ -calculus (\approx 10–15 students)
 - Temporal specification and verification of reactive and concurrent systems (\approx 10–15 students).

Apart from that, I gave advanced short courses on various subjects in Japan (JAIST), the Netherlands (University of Amsterdam), and Italy (University of Milan, Free University of Bozen-Bolzano).

In 1997, 2000 and 2005, I organised courses and workshops at the European Summer Schools for Logic, Language and Information (ESSLII).

Michael Zakharyashev: Main Publications

A full list of publications is available at <http://www.dcs.bbk.ac.uk/~michael/>

Publications in the DBLP Computer Science Bibliography:

<http://www.informatik.uni-trier.de/~ley/pers/hd/z/Zakharyashev:Michael.html>

Google Scholar profile: <http://scholar.google.co.uk/citations?user=bXRDSrEAAAAAJ&hl=en>

Authored Research Monographs:

1. D. GABBAY, A. KURUCZ, F. WOLTER, AND M. ZAKHARYASCHEV, *Many-Dimensional Modal Logics: Theory and Applications*. Studies in Logic, volume 148. Elsevier, North-Holland, 2003. 747 pp. ISBN 0 444 50826 0.
2. A. CHAGROV AND M. ZAKHARYASCHEV, *Modal Logic*, Clarendon Press, Oxford Logic Guides 35, 1997. 605 pp. ISBN 0-19-853779-4.

Articles in Refereed Journals:

1. G. GOTTLOB, S. KIKOT, R. KONTCHAKOV, V. PODOLSKII, T. SCHWENTICK, M. ZAKHARYASCHEV. *The price of query rewriting in ontology-based data access*. Artificial Intelligence. 213: 42-59 (2014)
2. R. KONTCHAKOV, I. PRATT-HARTMANN, M. ZAKHARYASCHEV. *Spatial reasoning with RCC8 and connectedness constraints in Euclidean spaces*. Artificial Intelligence. 217: 43-75 (2014)
3. A. ARTALE, R. KONTCHAKOV, V. RYZHIKOV, M. ZAKHARYASCHEV. *A Cookbook for Temporal Conceptual Data Modelling with Description Logics*. ACM Trans. Comput. Log. 15(3): 25 (2014)
4. R. KONTCHAKOV, Y. NENOV, I. PRATT-HARTMANN AND M. ZAKHARYASCHEV. *Topological Logics with Connectedness over Euclidean Spaces*. ACM Trans. Comput. Log. 14(2): 13 (2013)
5. M. MOSUROVIC, N. KRZAVAC, H. GRAVES AND M. ZAKHARYASCHEV. *A Decidable Extension of $SR\mathcal{OIQ}$ with Complex Role Chains and Unions*. J. of Artificial Intelligence Research (JAIR), 47: 809-851 (2013).
6. R. KONTCHAKOV, F. WOLTER AND M. ZAKHARYASCHEV. *Logic-based ontology comparison and module extraction, with an application to DL-Lite*. Artificial Intelligence. 174(15): 1093-1141 (2010).
7. R. KONTCHAKOV, I. PRATT-HARTMANN, F. WOLTER AND M. ZAKHARYASCHEV. *Spatial logics with connectedness predicates*. Logical Methods in Computer Science 6(3): (2010).
8. M. SHEREMET, F. WOLTER AND M. ZAKHARYASCHEV. *A modal logic framework for reasoning about comparative distances and topology*. Annals of Pure and Applied Logic 161(4): 534-559 (2010).

9. A. ARTALE, D. CALVANESE, R. KONTCHAKOV AND M. ZAKHARYASCHEV. *The DL-Lite Family and Relations*. Journal of Artificial Intelligence Research. (JAIR) 36: 1-69 (2009).
10. F. WOLTER AND M. ZAKHARYASCHEV. *Undecidability of the unification and admissibility problems for modal and description logics*. ACM Transactions on Computational Logic, 9(4): (2008).
11. M. SHEREMET, D. TISHKOVSKY, F. WOLTER AND M. ZAKHARYASCHEV. *A Logic for Concepts and Similarity*. Journal of Logic and Computation. 17(3): 415-452 (2007).
12. D. GABELAIA, A. KURUCZ, F. WOLTER AND M. ZAKHARYASCHEV. *Non-primitive recursive decidability of products of modal logics with expanding domains*. Annals of Pure and Applied Logic. 142(1-3): 245-268 (2006).
13. B. KONEV, R. KONTCHAKOV, F. WOLTER AND M. ZAKHARYASCHEV. *On Dynamic Topological and Metric Logics*. Studia Logica 84(1): 129-160 (2006).
14. D. GABELAIA, R. KONTCHAKOV, A. KURUCZ, F. WOLTER, AND M. ZAKHARYASCHEV. *Combining spatial and temporal logics: expressiveness vs. complexity*. Journal of Artificial Intelligence Research (JAIR), vol. 23, pp.167–243, 2005.
15. F. WOLTER AND M. ZAKHARYASCHEV. *A logic for metric and topology*. Journal of Symbolic Logic, vol.70, no.3, pp.795–828, 2005.
16. B. KONEV, R. KONTCHAKOV, F. WOLTER AND M. ZAKHARYASCHEV. *On dynamic topological and metric logics*. Studia Logica, 2005, in print.
17. R. KONTCHAKOV, A. KURUCZ, AND M. ZAKHARYASCHEV. *Undecidability of first-order intuitionistic and modal logics with two variables*. Bulletin of Symbolic Logic, vol.11, no.3, pp. 428–438, 2005.
18. D. GABELAIA, A. KURUCZ, F. WOLTER, AND M. ZAKHARYASCHEV. *Non-primitive recursive decidability of products of modal logics with expanding domains*. Annals of Pure and Applied Logic, 2005, in print.
19. D. GABELAIA, A. KURUCZ, F. WOLTER, AND M. ZAKHARYASCHEV. *Products of ‘transitive’ modal logics*. Journal of Symbolic Logic, vol.70, no.3, pp.993-1021, 2005.
20. O. KUTZ, C. LUTZ, F. WOLTER AND M. ZAKHARYASCHEV. *E-connections of abstract description systems*. Artificial Intelligence, 156(1), pp.1-73, 2004
21. S. BAUER, I. HODKINSON, F. WOLTER AND M. ZAKHARYASCHEV, *On Non-local Propositional and Weak Monodic Quantified CTL**, Journal of Logic and Computation, vol. 14(1), 2004, pp. 3–22. ISSN 0955-792X.
22. R. KONTCHAKOV, C. LUTZ, F. WOLTER, AND M. ZAKHARYASCHEV. *Temporalising tableaux*. Studia Logica, 2004, vol. 76(1), 2004, pp.91–134. ISSN 0039-3215.
23. O. KUTZ, H. STURM, N.-Y. SUZUKI, F. WOLTER AND M. ZAKHARYASCHEV. *Logics of metric spaces*. ACM Transactions in Computational Logic, vol. 4(2), 2003, pp.260–294. ISSN: 1529-3785.

24. F. WOLTER AND M. ZAKHARYASCHEV. *Axiomatizing the monodic fragment of first-order temporal logic*. Annals of Pure and Applied Logic, vol.118, 2002, pp.133-145. ISSN 0168-0072.
25. C. LUTZ, H. STURM, F. WOLTER, AND M. ZAKHARYASCHEV. *A tableau decision algorithm for modalized ALC with constant domains*. Studia Logica, vol.72, no.2, 2002. ISSN 0039-3215.
26. B. BENNETT, A. COHN, F. WOLTER, AND M. ZAKHARYASCHEV. *Multi-dimensional modal logic as a framework for spatio-temporal reasoning*. Applied Intelligence, vol.17, issue 3, pp.239-251, 2002. ISSN 0924-669X.
27. O. KUTZ, H. STURM, N.-Y. SUZUKI, F. WOLTER AND M. ZAKHARYASCHEV. *Axiomatizing distance logics*. Journal of Applied Non-Classical Logic, vol.12, pp.425-440, 2002. ISSN 1166-3081.
28. H. STURM, F. WOLTER AND M. ZAKHARYASCHEV. *Common knowledge and quantification*. Economic Theory, vol. 19 (2002), pp. 157–186. ISSN 0938-2259.
29. WOLTER AND M. ZAKHARYASCHEV. *Decidable fragments of first-order modal logics*. Journal of Symbolic Logic, vol. 66 (2001), pp.1415–1438. ISSN 0022-4812.
30. M. REYNOLDS AND M. ZAKHARYASCHEV. *On the products of linear modal logics*. Journal of Logic and Computation, vol. 11 (2001), pp.1–24. ISSN 0955-792X.
31. WOLTER, M. ZAKHARYASCHEV, AND M. MOSUROVIC. *Temporal description logics: a point-based approach*. AI*IA Notizie, Anno XIV, no. 1, Marzo 2001, pp.16-20.
32. I. HODKINSON, F. WOLTER AND M. ZAKHARYASCHEV, *Decidable fragments of first-order temporal logics*. Annals of Pure and Logic, vol.106 (2000), pp.85–134. ISSN 0168-0072.
33. F. WOLTER AND M. ZAKHARYASCHEV, *Modal description logic: modalizing roles*. Fundamenta Informaticae, 1999, vol.39 (1999), pp.411-438. ISSN 0169-2968.
34. A. CHAGROV AND M. ZAKHARYASCHEV, *Mathematical aspects of modal logic: achievements, tendencies, problems*, Bulletin of the Section of Logic, vol.27 (1998), pp.50–52.
35. Y. SUZUKI, F. WOLTER AND M. ZAKHARYASCHEV, *Speaking about transitive frames in propositional languages*, Journal of Logic, Language and Information, vol.7 (1998), pp.317–339. ISSN 0925-8531.
36. F. WOLTER AND M. ZAKHARYASCHEV, *On the relation between intuitionistic and classical modal logics*, Algebra and Logic, vol.36 (1997), pp.73–92.
37. M. ZAKHARYASCHEV, *Canonical formulas for $\mathbf{K4}$. Part III: the finite model property*, the Journal of Symbolic Logic, vol.62 (1997), pp.950–975. ISSN 0022-4812.
38. M. ZAKHARYASCHEV, *The greatest extension of $\mathbf{S4}$ into which intuitionistic logic is embeddable*, Studia Logica, vol.59 (1997), pp.345–358. ISSN 0039-3215.
39. A. CHAGROV AND M. ZAKHARYASCHEV. *On the independent axiomatizability of modal and intermediate logics*. Journal of Logic and Computation, vol.5 (1995), pp.2 87-302. ISSN 0955-792X.

40. M. ZAKHARYASCHEV AND A. ALEKSEEV. *All finitely axiomatizable normal extensions of $K4.3$ are decidable.* Mathematical Logic Quarterly, vol.41 (1995), pp. 15-23. ISSN 0942-5616.
41. M. ZAKHARYASCHEV. *A new solution to a problem of Hosoi and Ono.* Notre Dame Journal of Formal Logic, vol.35 (1994), pp. 450-457. ISSN 0029 4527.
42. M. ZAKHARYASCHEV. *A sufficient condition for the finite model property of modal logics above $K4$.* Bulletin of the IGPL, vol.1 (1993), pp. 13-21. ISSN 1367-0751.
43. A. CHAGROV AND M. ZAKHARYASCHEV. *The undecidability of the disjunction property of propositional logics and other related problems.* Journal of Symbolic Logic, vol.58 (1993), pp. 967-1002. ISSN 0022-4812.
44. M. ZAKHARYASCHEV. *Canonical formulas for $K4$. Part I: Basic results.* Journal of Symbolic Logic, vol.57 (1992), pp. 1377-1402. ISSN 0022-4812.
45. A. CHAGROV AND M. ZAKHARYASCHEV. *Modal companions of intermediate propositional logics.* Studia Logica, vol.51 (1992), pp. 49-82. ISSN 0039-3215.
46. M. ZAKHARYASCHEV. *Intermediate logics with disjunction free axioms are canonical.* IGPL Newsletter, vol.1 (1992), no.4, pp. 7-8.
47. A. CHAGROV AND M. ZAKHARYASCHEV. *The disjunction property of intermediate propositional logics.* Studia Logica, vol.50 (1991), pp. 189-216. ISSN 0039-3215.
48. M. ZAKHARYASCHEV. *Modal companions of intermediate logics: syntax, semantics and preservation theorems.* Mathematics of the USSR, Sbornik, vol.68 (1991), pp.277-289. ISSN 0025-5734.
49. A. CHAGROV AND M. ZAKHARYASCHEV. *On Hallden-completeness of intermediate and modal logics.* Bulletin of the Section of Logic, vol.19 (1990), pp.21-24.
50. M. ZAKHARYASCHEV. *Syntax and semantics of intermediate logics.* Algebra and Logic, vol.28 (1989), pp.262-282.
51. M. ZAKHARYASCHEV. *Syntax and semantics of modal logics containing $S4$.* Algebra and Logic, vol.27 (1988), pp.408-428.
52. M. ZAKHARYASCHEV. *On the disjunction property of intermediate and modal logics.* Mathematical Notes, vol.42 (1987), pp.901-905.
53. M. ZAKHARYASCHEV. *Normal modal logics containing $S4$.* Soviet Mathematics Doklady, vol.29 (1984), pp.252-255. ISSN 0197-6788.
54. M. ZAKHARYASCHEV. *On intermediate logics.* Soviet Mathematics Doklady, vol.27 (1983), pp.274-277. ISSN 0197-6788.
55. M. ZAKHARYASCHEV, M. KOROTKOVA AND S. POPOV. *An interactive system for theorem proving.* Semiotics and Informatics, vol.12 (1979), pp.22-23. (In Russian)

Edited Books:

1. RICCARDO ROSATI, SEBASTIAN RUDOLPH, MICHAEL ZAKHARYASCHEV: *Proceedings of the 24th International Workshop on Description Logics (DL 2011)*, Barcelona, Spain, July 13-16, 2011. CEUR Workshop Proceedings 745, CEUR-WS.org 2011
2. D. GABBAY, S. GONCHAROV, AND M. ZAKHARYASCHEV, (editors) *Mathematical Problem from Applied Logic I. New Logics for the XXI Century*, International Mathematical Series, Vol.4, Springer, 2005. ISBN 0-387-28688-8.
3. P. BALBIANI, N.-Y. SUZUKI, F. WOLTER, AND M. ZAKHARYASCHEV, (editors) *Advances in Modal Logic. Volume 4*. King's College Publications, 2003, 523 pp. ISBN 0-9543006-1-0.
4. F. WOLTER, H. WANSING, M. DE RIJKE AND M. ZAKHARYASCHEV, (editors) *Advances in Modal Logic. Volume 3*. World Scientific, 2002, 415 pp. ISBN 981-238-179-1.
5. A. KURUCZ, F. WOLTER AND M. ZAKHARYASCHEV (editors), Special issue 'Many-dimensional logical systems' of *Studia Logica*, vol.72(2), 2002. ISSN 0039-3215.
6. M. REYNOLDS AND M. ZAKHARYASCHEV (editors), Special issue 'International Conference on Temporal Logic' of *Journal of Logic and Computation*, vol.12(4), 2002. ISSN 0955-792X.
7. M. ZAKHARYASCHEV, K. SEGERBERG, M. DE RIJKE, AND H. WANSING (editors). *Advances in Modal Logic. Volume 2*, CSLI Publications, Stanford, 2001, 457 pp. ISBN 1-57586-272-7.
8. M. KRACHT, M. DE RIJKE, H. WANSING, AND M. ZAKHARYASCHEV (editors). *Advances in Modal Logic. Volume I*, CSLI Publications, Stanford, 1998, 392 pp. ISBN 1-57586-102-X.
9. M. ZAKHARYASCHEV AND YU. YANOV (editors). *Mathematical Logic in Programming*. Mir Publishers, Moscow, 1991, 420 pp. (Russian) ISBN 5-03-001708-9.

Chapters in Books:

1. F. WOLTER AND M. ZAKHARYASCHEV. *On the Blok-Esakia Theorem*. Leo Esakia on Duality in Modal and Intuitionistic Logics. Editor: Guram Bezhanishvili. Springer, Outstanding Contributions to Logic, Volume 4, 2014.
2. F. WOLTER AND M. ZAKHARYASCHEV. *Modal decision problems*. Handbook of Modal Logic, (P. Blackburn, J. van Benthem, F. Wolter editors), Elsevier, 2005.
3. R. KONTCHAKOV, A. KURUCZ, F. WOLTER, M. ZAKHARYASCHEV. *Space + Time = ?* The Logic of Space, (M. Aiello, J. van Benthem, and I. Pratt-Hartmann editors), Kluwer, 2005.
4. AGI KURUCZ, FRANK WOLTER, MICHAEL ZAKHARYASCHEV: *Modal Logics for Metric Spaces: Open Problems*. We Will Show Them! (2) 2005: 193-108. College Publications.

Papers in Refereed Conferences:

1. S. KIKOT, R. KONTCHAKOV, V. PODOLSKII, M. ZAKHARYASCHEV. *On the succinctness of query rewriting over shallow ontologies*. CSL-LICS 2014: 57

2. E. BOTOEVA, R. KONTCHAKOV, V. RYZHIKOV, F. WOLTER, M. ZAKHARYASCHEV: Query Inseparability for Description Logic Knowledge Bases. KR 2014. **(The 2014 Marco Cadoli Student Paper Prize)**
3. R. KONTCHAKOV, M. ZAKHARYASCHEV. *An Introduction to Description Logics and Query Rewriting*. Reasoning Web 2014: 195-244
4. R. KONTCHAKOV, M. REZK, M. RODRIGUEZ-MURO, G. XIAO, M. ZAKHARYASCHEV. *Answering SPARQL Queries over Databases under OWL 2 QL Entailment Regime*. International Semantic Web Conference (1) ISWC 2014: 552-567
5. A. ARTALE, R. KONTCHAKOV, F. WOLTER, M. ZAKHARYASCHEV. *Temporal Description Logic for Ontology-Based Data Access*. IJCAI 2013
6. A. ARTALE, R. KONTCHAKOV, V. RYZHIKOV, M. ZAKHARYASCHEV. *The Complexity of Clausal Fragments of LTL*. LPAR 2013: 35-52
7. ROMAN KONTCHAKOV, MARIANO RODRIGUEZ-MURO, MICHAEL ZAKHARYASCHEV: *Ontology-Based Data Access with Databases: A Short Course*. Reasoning Web 2013: 194-229
8. MARIANO RODRIGUEZ-MURO, ROMAN KONTCHAKOV, MICHAEL ZAKHARYASCHEV: *Ontology-Based Data Access: Ontop of Databases*. International Semantic Web Conference (1) 2013: 558-573
9. S. KIKOT, R. KONTCHAKOV, V. PODOLSKII, M. ZAKHARYASCHEV: *Exponential Lower Bounds and Separation for Query Rewriting*. ICALP (2) 2012: 263-274
10. STANISLAV KIKOT, ROMAN KONTCHAKOV, MICHAEL ZAKHARYASCHEV: *Conjunctive Query Answering with OWL 2 QL*. KR 2012
11. BORIS KONEV, ROMAN KONTCHAKOV, MICHEL LUDWIG, THOMAS SCHNEIDER, FRANK WOLTER, MICHAEL ZAKHARYASCHEV: *Conjunctive Query Inseparability of OWL 2 QL TBoxes*. AAAI 2011
12. A. ARTALE, R. KONTCHAKOV, V. RYZHIKOV, M. ZAKHARYASCHEV: *Tailoring Temporal Description Logics for Reasoning over Temporal Conceptual Models*. FroCoS 2011: 1-11
13. ROMAN KONTCHAKOV, YAVOR NENOV, IAN PRATT-HARTMANN, MICHAEL ZAKHARYASCHEV: *On the Decidability of Connectedness Constraints in 2D and 3D Euclidean Spaces*. IJCAI 2011: 957-962 **(Distinguished paper award)**
14. ROMAN KONTCHAKOV, CARSTEN LUTZ, DAVID TOMAN, FRANK WOLTER, MICHAEL ZAKHARYASCHEV: *The Combined Approach to Ontology-Based Data Access*. IJCAI 2011: 2656-2661
15. STANISLAV KIKOT, ROMAN KONTCHAKOV, MICHAEL ZAKHARYASCHEV: *Polynomial Conjunctive Query Rewriting under Unary Inclusion Dependencies*. RR 2011: 124-138 **(Best paper award)**
16. A. ARTALE, R. KONTCHAKOV, V. RYZHIKOV, M. ZAKHARYASCHEV: *Past and Future of DL-Lite*. AAAI 2010

17. AGI KURUCZ, FRANK WOLTER, MICHAEL ZAKHARYASCHEV: *Islands of Tractability for Relational Constraints: Towards Dichotomy Results for the Description Logic EL*. Advances in Modal Logic 2010: 271-291
18. A. ARTALE, R. KONTCHAKOV, V. RYZHIKOV, M. ZAKHARYASCHEV: *Complexity of Reasoning over Temporal Data Models*. ER 2010: 174-187
19. ROMAN KONTCHAKOV, CARSTEN LUTZ, DAVID TOMAN, FRANK WOLTER, MICHAEL ZAKHARYASCHEV: *The Combined Approach to Query Answering in DL-Lite*. KR 2010 (**Ray Reiter best paper prize**)
20. ROMAN KONTCHAKOV, IAN PRATT-HARTMANN, MICHAEL ZAKHARYASCHEV: *Interpreting Topological Logics over Euclidean Spaces*. KR 2010
21. A. ARTALE, R. KONTCHAKOV, V. RYZHIKOV, M. ZAKHARYASCHEV: *DL-Lite with Temporalised Concepts, Rigid Axioms and Roles*. FroCoS 2009: 133-148
22. ROMAN KONTCHAKOV, LUCA PULINA, ULRIKE SATTLER, THOMAS SCHNEIDER, PETRA SELMER, FRANK WOLTER, MICHAEL ZAKHARYASCHEV: *Minimal Module Extraction from DL-Lite Ontologies Using QBF Solvers*. IJCAI 2009: 836-841
23. R. KONTCHAKOV, I. PRATT-HARTMANN, F. WOLTER, M. ZAKHARYASCHEV: *Topology, connectedness, and modal logic*. Advances in Modal Logic 2008: 151-176
24. ROMAN KONTCHAKOV, MICHAEL ZAKHARYASCHEV: *DL-Lite and Role Inclusions*. ASWC 2008: 16-30
25. ROMAN KONTCHAKOV, FRANK WOLTER, MICHAEL ZAKHARYASCHEV: *Can You Tell the Difference Between DL-Lite Ontologies?*. KR 2008: 285-295 (**Ray Reiter best paper prize**)
26. R. KONTCHAKOV, I. PRATT-HARTMANN, F. WOLTER, M. ZAKHARYASCHEV: *On the Computational Complexity of Spatial Logics with Connectedness Constraints*. LPAR 2008: 574-589
27. A. ARTALE, D. CALVANESE, R. KONTCHAKOV, M. ZAKHARYASCHEV: *DL-Lite in the Light of First-Order Logic*. AAAI 2007: 361-366
28. ALESSANDRO ARTALE, DIEGO CALVANESE, ROMAN KONTCHAKOV, VLADISLAV RYZHIKOV, MICHAEL ZAKHARYASCHEV: *Reasoning over Extended ER Models*. ER 2007: 277-292
29. A. ARTALE, D. CALVANESE, R. KONTCHAKOV, M. ZAKHARYASCHEV: *Query Answering in Expressive Variants of DL-Lite*. SEBD 2007: 250-257
30. ALESSANDRO ARTALE, ROMAN KONTCHAKOV, CARSTEN LUTZ, FRANK WOLTER, MICHAEL ZAKHARYASCHEV: *Temporalising Tractable Description Logics*. TIME 2007: 11-22
31. BORIS KONEV, ROMAN KONTCHAKOV, FRANK WOLTER, MICHAEL ZAKHARYASCHEV: *Dynamic topological logics over spaces with continuous functions*. Advances in Modal Logic 2006: 299-318
32. SILVIO GHILARDI, CARSTEN LUTZ, FRANK WOLTER, MICHAEL ZAKHARYASCHEV: *Conservative extensions in modal logic*. Advances in Modal Logic 2006: 187-207

33. MIKHAIL SHEREMET, DMITRY TISHKOVSKY, FRANK WOLTER, MICHAEL ZAKHARYASCHEV: *From topology to metric: modal logic and quantification in metric spaces*. Advances in Modal Logic 2006: 429-448
34. ULLRICH HUSTADT, DMITRY TISHKOVSKY, FRANK WOLTER, MICHAEL ZAKHARYASCHEV: *Automated Reasoning About Metric and Topology*. JELIA 2006: 490-493
35. B. KONEV, F. WOLTER AND M. ZAKHARYASCHEV. *Temporal logics over transitive states*. LNCS 3632, (R. Nieuwenhuis editor), pp.182–203, Springer, 2005 (Proceedings of CADE-05).
36. M. SHEREMET, D. TISHKOVSKY, F. WOLTER, AND M. ZAKHARYASCHEV. *Comparative similarity, tree automata, and Diophantine equations*. LNAI, 2005, Springer, (Proceedings of LPAR-05).
37. M. SHEREMET, D. TISHKOVSKY, F. WOLTER, AND M. ZAKHARYASCHEV. ‘Closer’ representation and reasoning. Proceedings of ‘Description Logic’ 2005 (DL-05), Edinburgh, 2005, pp.25–36.
38. B. KONEV, R. KONTCHAKOV, F. WOLTER AND M. ZAKHARYASCHEV. *On dynamic topological and metric logics*. Proceedings of AiML 2004, September 2004, Manchester, U.K.
39. D. GABELAIA, A. KURUCZ AND M. ZAKHARYASCHEV. *Products of transitive modal logics without the (abstract) finite model property*. Proceedings of AiML 2004, September 2004, Manchester, U.K.
40. D. GABELAIA, A. KURUCZ, F. WOLTER AND M. ZAKHARYASCHEV *Products of ‘transitive’ modal logics with constant and expanding domains*, in: ‘Proceedings of the 38th MLG Meeting’, October 2004, Gamagori, Japan.
41. A. KURUCZ AND M. ZAKHARYASCHEV, *A note on relativised products of modal logics*, in: ‘Advances in Modal Logic, Volume 4’ (eds.: P. Balbiani, N.-Y. Suzuki, F. Wolter, M. Zakharyashev), 2003, pp.221–242. ISBN 0-9543006-1-0
42. I. HODKINSON, R. KONTCHAKOV, A. KURUCZ, F. WOLTER AND M. ZAKHARYASCHEV, *On the computational complexity of decidable fragments of first-order linear temporal logics*, in: ‘Proceedings of TIME-ICTL 2003’ (eds.: M. Reynolds and A. Sattar), IEEE Computer Society, 2003, pp.91–98. ISBN 0-7695-1912-1.
43. D. GABELAIA, R. KONTCHAKOV, A. KURUCZ, F. WOLTER, AND M. ZAKHARYASCHEV, *On the computational complexity of spatio-temporal logics*, in: ‘Proceedings of the 16th International Conference FLAIRS 2003’ (eds.: I. Russell and S. Haller), AAAI Press, 2003, pp.460–464. ISBN 1-57735-177-0.
44. C. LUTZ, F. WOLTER AND M. ZAKHARYASCHEV. *A tableau algorithm for reasoning about concepts and similarity*. Automated Reasoning with Analytic Tableaux and Related Methods. Lecture Notes in Computer Science, Vol. 2796. Cialdea Mayer, Marta; Pirri, Fiora (Eds.), pp.134–149, 2003. ISBN 3-540-40787-1.
45. F. WOLTER AND M. ZAKHARYASCHEV. Reasoning about distances. 18th International Joint Conference on Artificial Intelligence (IJCAI 2003), pp.1275-1280. Morgan Kaufmann, 2003. ISBN 0-127-05661-0.

46. F. WOLTER AND M. ZAKHARYASCHEV. *Qualitative spatio-temporal representation and reasoning: a computational perspective*. In G. Lakemeyer and B. Nebel, editors, Exploring Artificial Intelligence in the New Millenium, Morgan Kaufmann, 2002. ISBN 1-55860-811-7.
47. I. HODKINSON, F. WOLTER AND M. ZAKHARYASCHEV. *Decidable and undecidable fragments of first-order branching temporal logics*. Proceedings of the 17th Annual IEEE Symposium on Logic in Computer Science, LICS 2002, pp.393-402. IEEE Computer Science Press. ISBN 0-7695-1483-9.
48. S. BAUER, I. HODKINSON, F. WOLTER AND M. ZAKHARYASCHEV. *On non-local propositional and one-variable quantified CTL**. Proceedings of TIME 2002, pp.2-9. IEEE Computer Science Press. ISBN 0-7695-1474-X.
49. O. KUTZ, F. WOLTER AND M. ZAKHARYASCHEV. *Connecting abstract description systems*. In Proceedings of the 8th International Conference on Principles of Knowledge Representation and Reasoning (KR'02), pp.215-226. Morgan Kaufmann, 2002. ISBN 1-55860-847-8.
50. A. ARTALE, E. FRANCONI, F. WOLTER AND M. ZAKHARYASCHEV. *A temporal description logic for reasoning over conceptual schemas and queries*. In Proceedings of JELIA-02, Lecture Notes in Artificial Intelligence, vol. 2424, Springer-Verlag, pp.98-110, 2002. ISBN 3-540-44190-5.
51. M. ZAKHARYASCHEV, F. WOLTER AND A. CHAGROV, *Advanced Modal Logic*. 2nd edition of the Handbook of Philosophical Logic, D. Gabbay and F. Guenther, editors, Kluwer Academic Publishers, vol.3, 2001, pp.83-266. ISBN 0-7923-7160-7.
52. F. WOLTER AND M. ZAKHARYASCHEV, *Dynamic description logics*, In M. Zakharyashev, K. Segerberg, M. de Rijke, and H. Wansing, editors, Advances in Modal Logic, vol. 2. CSLI Publications, Stanford, 2001, pp.431-446. ISBN 1-57586-272-7.
53. C. LUTZ, H. STURM, F. WOLTER, AND M. ZAKHARYASCHEV. *Tableaux for temporal description logic with constant domains*. In R. Gore, A. Leitsch, and T. Nipkow, editors, Automated Reasoning (IJCAR 2001), number 2083 of Lecture Notes in Artificial Intelligence, Springer, 2001, pp.121-136. ISBN 3-540-42254-4.
54. I. HODKINSON, F. WOLTER AND M. ZAKHARYASCHEV. *Monodic fragments of first-order temporal logics: 2000-2001 A.D.* In R. Nieuwenhuis and A. Voronkov, editors, Logic for Programming, Artificial Intelligence and Reasoning, number 2250 of Lecture Notes in Artificial Intelligence, Springer, 2001, pp.1-23. ISBN 3-540-42957-3.
55. M. ZAKHARYASCHEV, K. SEGERBERG, M. DE RIJKE, AND H. WANSING, *The roots of modern modal logic*. In M. Zakharyashev, K. Segerberg, M. de Rijke, and H. Wansing editors, Advances in Modal Logic, vol. 2. CSLI Publications, Stanford 2001, pp.11-28. ISBN 1-57586-272-7.
56. F. WOLTER AND M. ZAKHARYASCHEV, *Spatio-temporal representation and reasoning based on RCC-8*. In A. Cohn, F. Giunchiglia, and B. Selman, editors, Principles of Knowledge representation and Reasoning (KR2000), pp.3-14, 2000. Morgan Kaufmann. ISBN 1-55860-690-4. **(Best paper award)**

57. F. WOLTER AND M. ZAKHARYASCHEV, *Temporalizing description logics*, In D. Gabbay and M. de Rijke, editors, *Frontiers of Combining Systems II*, pp. 379–402, Kluwer Academic Publishers, 2000. ISBN 0-86380-252-4.
58. H. STURM, N.-Y. SUZUKI, F. WOLTER AND M. ZAKHARYASCHEV. *Semi-qualitative reasoning about distances: a preliminary report*. In M. Ojeda-Aciego, I. de Guzmán, G. Brewka, L. Moniz Pereira (Eds.), *Logics in Artificial Intelligence (JELIA 2000)*, pp.37–56, number 1919 *Lecture Notes in Artificial Intelligence*, Springer, Berlin, 2000. ISBN 3-540-041131-3.
59. H. STURM, F. WOLTER AND M. ZAKHARYASCHEV. *Monodic epistemic predicate logic*. In M. Ojeda-Aciego, I. de Guzmán, G. Brewka, L. Moniz Pereira (Eds.), *Logics in Artificial Intelligence (JELIA 2000)*, pp.229-344, number 1919 *Lecture Notes in Artificial Intelligence*, Springer, Berlin, 2000. ISBN 3-540-041131-3.
60. F. WOLTER AND M. ZAKHARYASCHEV. *Spatial reasoning in RCC-8 with Boolean region terms*. In W. Horn, editor, *Proceedings of the 14th European Conference on Artificial Intelligence (ECAI 2000)*, pages 244-250. IOS Press, 2000. ISBN 1-58603-013-2.
61. F. WOLTER AND M. ZAKHARYASCHEV, *Intuitionistic modal logics as fragments of classical bimodal logics*, In E. Orłowska, editor, *Logic at Work*, Springer-Verlag, 1999, pp.168–186. ISBN 3-7908-116415.
62. F. WOLTER AND M. ZAKHARYASCHEV, *Intuitionistic modal logic*, In A. Cantini, E. Casari, and P. Minari, eds, *Logic and Foundation of Mathematics*. Kluwer Academic Publishers, 1999, pp.227–238. ISBN 0-7923-5659-4.
63. F. WOLTER AND M. ZAKHARYASCHEV, *Multi-dimensional description logics*. *Proceedings of the 16th International Joint Conference on Artificial Intelligence, IJCAI'99*, pages 104–109. Morgan Kaufmann, 1999. ISBN 1-55860-6133-0.
64. F. WOLTER AND M. ZAKHARYASCHEV, *Satisfiability problem in description logics with modal operators*, In A.G. Cohn, L. Schubert, S.C. Shapiro, editors, *Principles of Knowledge Representation and Reasoning (KR'98)*, Montreal, Canada, 1998. Morgan Kaufmann, pp. 512–523. ISBN 1-55860-554-1.
65. A. CHAGROV AND M. ZAKHARYASCHEV. *Sahlqvist formulas are not so elementary even above S4*. In *Logic Colloquium'92*, (L. Csirmaz, D. Gabbay, M. de Rijke, editors), CSLI Publications, Stanford, 1995, pp. 61-73. ISBN 1-881526-98-4.
66. V. ANTIMIROV, A. VORONKOV, A. DEGTYARIOV AND M. ZAKHARYASCHEV. *Mathematical logic in programming*. In: *Mathematical Logic in Programming* (M. Zakharyashev and Yu. Yanov, editors), Mir Publishers, Moscow, 1991, pp.331-407. (Russian) ISBN 5-03-001708-9.
67. M. ZAKHARYASCHEV. *Theorem proving in intermediate and modal logics*. *Lecture Notes in Computer Science* (L. Budach, R.G. Bukharaev and O.B. Lupanov, editors), vol.278 (1987), pp.492-496, Springer-Verlag.