Curriculum Vitae
Sergey Kitaev

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Employment

○ **Reader**, University of Strathclyde, Glasgow, Scotland, from January 2011

○ **Associate Professor of Mathematics**, Reykjavík University, Iceland, June 2006 – July 2011

○ **Assistant Professor of Mathematics**, Reykjavík University, Iceland, July 2005 – May 2006

○ **Visiting Assistant Professor**, University of California, San Diego, USA, Spring Quarter 2005

○ **Visiting Assistant Professor**, University of Kentucky, Lexington, USA, Aug 2003 – Dec 2004

○ **Lecturer**, Göteborg University, Göteborg, Sweden, 2003

○ **Researcher** (part time job), Sobolev Institute of Mathematics, Novosibirsk, Russia, 1998 – 2002

Short- and long-term research visits

○ Nihon University, Tokyo, Japan, Aug 2018, Feb 2018

○ Fudan University, Shanghai, China, Apr 2017

○ Shanghai Jiao Tong University, Shanghai, China, Apr 2017

○ Center for Combinatorics, Nankai University, Tianjin, China, Apr 2018, Apr 2017, Nov 2015, Jul 2015, Nov 2014

○ Sungkyunkwan University, Suwon, Korea, July 2018, Dec 2017, Sep 2017, Feb 2017

○ University of Bourgogne, Dijon, France, Visiting Professor, Nov 2016, Jun 2015

○ Sobolev Institute of Mathematics, Novosibirsk, Russia, Jul–Aug 2017, Jul–Aug 2016, Jul–Aug 2015, Aug 2014, Jul–Aug 2012, Jul–Aug 2011, Apr–Jul 2009, Jun–Aug 2007

○ University of California, San Diego, Jul 2014, Jan 2013, Feb 2012, Feb 2011, Jan 2010, Nov 2006

○ University of St Andrews, UK, May 2013, Nov 2011, Oct 2007

○ University of Warwick, UK, May 2012

○ Universitat Politecnica de Catalunya, Barcelona, Spain, Jun–Dec 2010

○ Jagiellonian University in Krakow, Krakow, Poland, Feb 2010

○ University of California, San Diego, Visiting Associate Professor, Winter Quarter 2009

○ Mittag-Leffler Institute, The Royal Swedish Academy of Sciences, Stockholm, Sweden, Program in Algebraic Combinatorics, Jan–Mar 2005

Education

- **PhD in Mathematics**, Göteborg University, January 2003; "Generalized patterns in words and permutations"; Advisor: Einar Steingrímsson.

- **Licentiatexamen in Mathematics**, Göteborg University, December 2000; "Symbolic Sequences, Crucial Words and Iterations of a Morphism"; Advisor: Einar Steingrímsson.

- **M.Sc. in Applied Mathematics and Informatics**, Novosibirsk State University, June 1998; "Crucial words for some sets of prohibitions"; Advisor: Alexander Evdokimov.

- **B.Sc. in Mathematics** (A Diploma), Novosibirsk State University, June 1996; "Deadlock words for sets of prohibitions"; Advisor: Alexander Evdokimov.

Research interests

Enumerative and algebraic combinatorics, combinatorics on words, discrete analysis, graph theory

Journal editorial board membership

Journal of Discrete Mathematics (JDM; 2012–2016), Open Journal of Discrete Mathematics (OJDM; 2010–2013), PP 2012 Special Issue of "Pure Mathematics and Applications" (Pu.M.A.; guest editor)

Referee work for 47 journals

Acta Informatica, Adv. Applied Math., Algorithmica, Annales Mathematicae et Informaticae, Annals Comb., Applicable Analysis and Discr. Math., Ars Combinatoria, Ars Mathematica Contemporanea, Australasian J. Comb., Bulletin of the ICA, Contr. Discr. Math., Creative Math. and Informatics, Discr. Appl. Math., Discr. Math., Discr. Math. & Theor. Comp. Sci., Discussiones Mathematicae Graph Theory, Elect. J. Comb., Europ. J. Comb., FILOMAT, Graphs and Comb., Inform. Process. Letters, INTEGERS: Elect. J. Comb. Number Theory, J. Algebr. Comb., J. Automata, Lang. Comb., J. Combin. Optimization, J. Comb. Theory Ser. A, J. Comb., J. Difference Equations and Appl., J. Discr. Math., J. Integer Sequences, J. Math. Analysis and Appl., J. Math. Modelling and Algorithms, Mathematics Magazine, Online J. Analytic Comb., Open J. Discr. Math., Prikladnaya Diskretnaya Matematika, Prikladnaya Diskretnaya Matematika. Supplement, Pure Math. and Applications, Order, RAIRO - Theor. Inform. and Applications, SIAM J. Discrete Math., Seminaire Lotharingien de Combinatoire, The Computer J., Theor. Comp. Sci., Transactions Comb., Turkish J. Math., Utilitas Mathematica

Membership

- Reviewer for *Math Reviews* (73 reviews)

- *Edinburgh Mathematical Society* (2012–2018)

- *British Combinatorial Committee* (2015–2017)

- Steering Committee of the *Conference on Permutation Patterns* (since 2014)

- *Strathclyde Combinatorics Group* (since 2011)

- *Icelandic Center of Excellence in Theoretical Computer Science*, *ICE-TCS* (2005–2011)

- Faculty Research Committee, University of Strathclyde (2014–2017)

- Departmental Knowledge Exchange Committee, University of Strathclyde (2015–2016)

- Departmental Industrial Advisory Board, University of Strathclyde (2013–2015)

- Department Management Team, University of Strathcyde (2012–2016)

- Reviewer for *EPSRC*, *National Security Agency* (*NSA*) *Mathematical Sciences Grant Program*, *Russian Science Foundation*, *Ministry of Education and Science of the Russian Federation*, and *South Africa's National Research Foundation* (*NRF*)

Organizing and program committees

○ 13*th International Conference on Language and Automata Theory and Applications* (*LATA* 2019), a PC member

○ *Combinatorics Workshop* at the *British Mathematics Colloquium* (*BMC* 2018), the organiser

○ 26*th British Combinatorial Conference* (*BCC* 2017), Chair

○ Mini-symposium "Patterns in permutations and words" at BCC 2017, the organiser

○ 10*th annual conference on Permutation Patterns* (*PP* 2012), Chair

○ 23*th Formal Power Series and Algebraic Combinatorics* (*FPSAC* 2011)

○ 10*th Nordic Combinatorial Conference* (*NORCOM* 2010), Chair

○ 4*th annual conference on Permutation Patterns* (*PP* 2006)

Postdoctoral mentor for

Amy Glen (2008–2009), Vit Jelinek (2009–2010), Pavel Salimov (2011), Chris Severs (2011), Henning Úlfarsson (2010–2011)

Examiner for Ph.D. defences (vivas) of

Andrew Collins (University of Warwick, 2017), Jason Smith (University of Strathclyde, 2015), Ruth Hoffmann (University of St Andrews, 2015), Stuart Hannah (University of Strathclyde, 2015), Chris Purcell (University of Warwick, 2013), Eddie Bell (Lancaster University, 2011)

Research and administrative related activities

○ Director of Internationalisation, Comp. and Inform. Sci. Dept., Univ. of Starthclyde (since 2018)

○ Director of Research at the Comp. and Inform. Sci. Dept., Univ. of Starthclyde (2014–2017)

○ External Examiner for the MSc Applicable Mathematics programme at the London School of Economics and Political Science (2016, 2017, 2018)

○ Director of Departmental Postgraduate Program, University of Strathclyde (2013-2014)

○ Financial director of the *Mathematics Institute*, Reykjavík University (2009–2010)

○ Member of the *Graduate Studies Council*, Reykjavík University (2009–2010)

○ Development from scratch (together with Einar Steingrímsson) of the *Masters Program in Mathematics Education*, Reykjavík University (2005–2008)

○ Development from scratch (together with Einar Steingrímsson and Pawel Bartoszek) of the *B.Sc. Program in Mathematics*, Reykjavík University (2006–2008)

○ Training the Icelandic National Mathematics Olympiad Team (2007, 2008)

○ Development of a course in Combinatorics for gifted children in cooperation with *Ad Astra* (2007)

Honors

○ Listed (as for August 20, 2018) among the most cited mathematicians based on graduation year at sites.google.com/view/mathematiciancitations/home.

○ Keynote Speaker, *Theoretical and Computational Discrete Mathematics* (*TCDM* 2018), University of Derby, UK, September 14–15, 2018

- Invited Speaker, 5*th International Conference on Riordan Arrays and Related Topics*, Busan, Korea, June 25–29, 2018

- Invited Speaker, 21*st International Conference on Developments in Language Theory* (*DLT* 2017), University of Liége, Liége, Belgium, August 7, 2017

- Principle Lecturer, 2017 *AORC Open School on Combinatorial Methods in the Analysis of Algorithm and Data Structures*, Sungkyunkwan University, Korea, February 20–24, 2017.

- Receipt of Strathclyde Teaching Excellence Award for being a supportive teacher, 2016.

- Receipt of a grant (£7,000) from London Mathematical Society to support British Combinatorial Conference 2017, 2016.

- Receipt of a grant (£850) from Edinburgh Mathematical Society to support British Combinatorial Conference 2017, 2016.

- A primary contact for a MoU between the University of California at San Diego and the University of Strathclyde for 2016–2021.

- Receipt of a grant (£3,000) from Glasgow Mathematical Journal Trust to support British Combinatorial Conference 2017, 2015.

- Recipient of a grant (£500) from London Mathematical Society to visit the University of Bourgogne, 2015.

- Invited talk, *Scottish Combinatorics Meeting*, University of Glasgow, April 29-30, 2015.

- The paper "Number of cycles in the graph of 312-avoiding permutations" (co-authored with R. Ehrenborg and E. Steingrímsson) is named among most downloaded articles in the last 90 days in *J. Combin. Theory, Ser. A* in February 2015.

- Plenary speaker at the 12*th International Permutation Patterns Conference* held on July 7-11, 2014 at East Tennessee State University, Johnson City, TN, USA.

- Recipient of a Global Engagements in Research grant, University of Strathclyde (£1,990), 2014.

- Recipient of a grant (£1,020) from Edinburgh Mathematical Society to support Prof. Vincent Vajnovszki's visit of the University of Strathclyde to work on Gray codes, 2014.

- Project "Algorithms for graphs representable by words" supervised by myself and implemented by Marc Glen was supported by EPSRC Vacation Bursary Programme 2014 (£2,300).

- Recipient of a Global Engagements in Research grant from EPSRC (£1,200), 2013.

- Recipient of a grant (£625) from Edinburgh Mathematical Society to support Dr Vadim Lozin's visit of the University of Strathclyde to work on word-representable graphs, 2013.

- Invited speaker at *AMS-MAA joint Meetings* in San Diego in 2013 and in San Francisco in 2010.

- Recipient of a grant (£1,000) from Edinburgh Math. Society to for Perm. Patterns Conf. 2012.

- A primary contact in a formal agreement on cooperation between the *Department of Math.* at the University of California, San Diego and the *Math. Institute*, Reykjavík University (2009–2014)

- The paper "(2+2)-free posets, ascent sequences and pattern avoiding permutations, *J. Combin. Theory, Ser. A* **117** (2010) 7, 884–909"(co-authored with M. Bousquet-Melou, A. Claesson and M. Dukes) is the most cited article published by the journal since 2008 (as for Jan 2013).

- Recipient of a grant "Abel Extraordinary Chair" (39,800 Euro) from Universidad Computense de Madrid, Spain, for 6 month research stay in Universitat Politecnica de Catalunya, 2010.

- Co-recipient of a Grant for Excellence (600,000 USD), Iceland Science Fund., 2009.

- The paper "Introduction to partially ordered patterns, *Disc. App. Math.* **155**, Issue 8, 1 (2007), 929–944" is named among top 25 hottest articles in *Discrete Applied Math.* in April–June 2007.

- Co-recipient of a Grant for Excellence (300,000 USD), Iceland Science Fund., 2006.

- AXΩ professor of the week, University of California, San Diego, May 2005.

- Research grant, The Royal Swedish Academy of Sciences, 2003.

- Research grant, Stiftelsen Wilhelm och Martina Lungrens Vetenskapsfond, 2002.

- First Degree Diploma at the XXXVII International Scientific Conference "Student and Scientific-Technical Progress", Novosibirsk, April 1999

- B.Sc. in Mathematics with A Diploma, June 1996.

- First Degree Diploma at the XXXIV International Scientific Conference "Student and Scientific-Technical Progress", Novosibirsk, April 1996.

- First Degree Diploma at the XXX International Scientific Conference "Student and Scientific-Technical Progress", Novosibirsk, April 1992.

- Winner of a number of mathematical school Olympiads at different levels.

- Winner of a number of tournaments in judo and sambo (among others: champion of the cities of Siberia (1989); two times champion of Novosibirsk State University).

Teaching experience

University of Strathclyde, United Kingdom

Logic and Algorithms (Spring 2019, 2018), Combinatorics for Computer Science 2 (Fall 2018–2014), Computability and Complexity (Fall 2018–2013), Data Analytics (Spring 2017), Business Analytics (Spring 2016–2013), Machines, Languages and Computation (Spring 2016), Topics in Computing 1 (Fall 2012, 2011), Topics in Computing 2 (Fall 2011–2013), Programming Language Definition and Implementation (Fall 2011)

African Institute for Mathematical Sciences (AIMS), Ghana

Combinatorics (Spring 2015)

Reykjavík University, Iceland

Graph Theory (Spring 2011, 2007, Fall 2005), Probability Theory (Spring 2011, Fall 2009), Combinatorics on Words (Spring 2010), Differential Equations (Spring 2010), Discrete Mathematics (Spring 2010, 2008–2006, Fall 2008), Analysis II (Fall 2009), Calculus (Fall 2008), Linear Algebra (Fall 2008–2006), Combinatorics (Spring 2008), Topics in Combinatorics (Fall 2006), Introduction to Mathematics (Fall 2005)

University of California, San Diego, USA

Calculus 10C (Winter 2009, Spring 2005), Calculus 10B (Spring 2005)

University of Kentucky, USA

Calculus III (MA213, Fall 2004), Calculus MA123 (Fall 2004, 2003, Spring 2004), Operations Research MA416 (Spring 2004), Combinatorics and Graph Theory MA415G (Fall 2003)

Göteborg University/Chalmers University of Technology, Sweden

Geometry MAN001 (Spring 2003), Discrete Mathematics LMA100 (Spring 2003, Fall 2002), Linear Algebra MIN600 (Fall 2002, 2001), Discrete Mathematics MAN240 (Spring 2002, 2000), Mathematical Analysis TMA552 (Spring 2002), Matematik IT TMA245 (Fall 2001), Mathematical Analysis in several variables TMA082B (Spring 2001), Mathematical Analysis (one variable) MA1200 (Spring 2001), Linear Algebra MAN040 (Fall 2000)

Publications (136 items)

Books

1. S. Kitaev: Patterns in permutations and words, *Monographs in Theoretical Computer Science* (with a foreword by Jeffrey B. Remmel), Springer-Verlag, ISBN 978-3-642-17332-5, 2011.

2. S. Kitaev and V. Lozin: Words and Graphs, *Monographs in Theoretical Computer Science* (with a foreword by Martin Charles Golumbic), Springer-Verlag, ISBN: 978-3-319-25857-7, 2015.

Books edited

3. Surveys in Combinatorics 2017. Edited by A. Claesson, M. Dukes, S. Kitaev, D. Manlove, K. Meeks, Cambridge University Press, London Mathematical Society Lecture Note Series (440), Online ISBN: 9781108332699, 2017.

4. Permutation Patterns 2012 Special Issue of "Pure Mathematics and Applications" (Pu.M.A.). Edited by A. Claesson and S. Kitaev, 2012.

Journal publications and chapters in books

5. S. Kitaev: Generalized pattern avoidance with additional restrictions, *Séminaire Lotharingien de Combinatoire* **B48e** (2003), 19 pp.

6. S. Kitaev: Multi-avoidance of generalised patterns, *Discrete Mathematics* **260** (2003), 89–100.

7. S. Kitaev: There are no iterated morphisms that define the Arshon sequence and the sigma-sequence, *Journal of Automata, Languages and Combinatorics* **8** (2003) 1, 43–50.

8. S. Kitaev, T. Mansour: Partially ordered generalized patterns and k-ary words, *Annals of Combinatorics* **7** (2003), 191–200.

9. S. Kitaev: The sigma-sequence and counting occurrences of some patterns, subsequences and subwords, *The Australasian Journal of Combinatorics* **29** (2004), 187–200.

10. A. Evdokimov, S. Kitaev: Crucial words and the complexity of some extremal problems for sets of prohibited words, *Journal of Combinatorial Theory – Series A* **105/2** (2004), 273–289.

11. S. Kitaev, T. Mansour: The problem of the pawns, *Annals of Combinatorics* **8** (2004), 81–91.

12. S. Kitaev: On multi-avoidance of right angled numbered polyomino patterns, *Integers: Electronic Journal of Combinatorial Number Theory* **4** (2004), A21, 20pp.

13. S. Kitaev, T. Mansour, P. Séébold: The Peano curve and counting occurrences of some patterns, *Journal of Automata, Languages and Combinatorics* **9** (2004) 4, 439–455.

14. S. Kitaev, T. Mansour, A. Vella: Pattern avoidance in matrices, *Journal of Integer Sequences* **8**, no. 2 (2005), Article 05.2.2, 16 pp.

15. S. Kitaev: Partially ordered generalized patterns, *Discrete Mathematics* **298** (2005), 212–229.

16. S. Kitaev, T. Mansour: Simultaneous avoidance of generalized patterns, *Ars Combinatoria* **75** (2005), 267–288.

17. S. Kitaev, T. Mansour: On multi-avoidance of generalized patterns, *Ars Combinatoria* **76** (2005), 321–350.

18. S. Kitaev, T. Mansour: Linear sequences and Chebyshev polynomials, *The Fibonacci Quarterly* **43.3** (2005), 256–261.

19. A. Burstein, S. Kitaev: On unavoidable sets of word patterns, *SIAM Journal on Discrete Mathematics* **19** (2005) 2, 371–381.

20. S. Kitaev: Segmented partially ordered generalized patterns, *Theoretical Computer Science* **349** (2005) 3, 420–428.

21. S. Kitaev: Counting independent sets on path-schemes, *Journal of Integer Sequences* **9**, no. 2 (2006), Article 06.2.2, 8 pp.

22. S. Kitaev, J. Remmel: Classifying descents according to equivalence mod k, *Electronic Journal of Combinatorics* **13(1)** (2006), #R64.

23. S. Kitaev, T. McAllister, K. Petersen: Enumerating segmented patterns in compositions and encoding with restricted permutations, *Integers: Electronic Journal of Combinatorial Number Theory* **6** (2006), A34, 16pp.

24. S. Kitaev: Introduction to partially ordered patterns, *Discrete Appl. Math.* **155** (2007), 929–944.

25. S. Kitaev, J. Remmel: Classifying descents according to parity, *Annals of Combinatorics* **11** (2007), 173–193.

26. S. Heubach, S. Kitaev, T. Mansour: Partially ordered patterns and compositions, *Pure Mathematics and Applications* (*Pu.M.A.*) **17** (2007), No. 1–2, pp. 1–12.

27. S. Kitaev, J. Robbins: On multi-dimensional patterns, *Pure Mathematics and Applications* (*Pu.M.A.*) **18** (2007), No. 3–4, pp. 1–9.

28. S. Kitaev, T. Mansour, P. Séébold: Counting ordered patterns in words generated by morphisms, *Integers: Electronic Journal of Combinatorial Number Theory* **8** (2008), A03, 28pp.

29. S. Avgustinovich, S. Kitaev: On uniquely k-determined permutations, *Discrete Mathematics* **308** (2008), 1500–1507.

30. S. Kitaev, A. Pyatkin: On representable graphs, *Journal of Automata, Languages and Combinatorics* **13** (2008) 1, 45–54.

31. S. Kitaev, T. Mansour, J. Remmel: Counting descents, rises, and levels, with prescribed first element, in words, *Discrete Mathematics & Theoretical Computer Science* **10:3** (2008), 1–22.

32. S. Kitaev, S. Seif: Word problem of the Perkins semigroup via directed acyclic graphs, *Order* **25** (2008) 3, 177–194.

33. A. Claesson, S. Kitaev: Classification of bijections between 321- and 132-avoiding permutations, *Séminaire Lotharingien de Combinatoire* **B60d** (2008), 30 pp.

34. A. Burstein, S. Kitaev, T. Mansour: Counting independent sets in certain classes of (almost) regular graphs, *Pure Mathematics and Applications* (*Pu.M.A.*) **19** (2008), no. 2–3, 17–26.

35. A. Burstein, S. Kitaev: Partially ordered patterns and their combinatorial interpretations, *Pure Mathematics and Applications* (*Pu.M.A.*) **19** (2008), no. 2–3, 27–38.

36. S. Kitaev, T. Mansour, P. Séébold: Counting ordered patterns in words generated by morphisms, *Lecture Notes in Computer Science* **5196** (2008) 287–298.

37. A. Claesson, S. Kitaev, E. Steingrímsson: Decompositions and statistics for beta(1,0)-trees and nonseparable permutations, *Advances in Applied Mathematics* **42** (2009) 313–328.

38. E. Deutsch, S. Kitaev, J. Remmel: Equidistribution of descents, adjacent pairs, and place-value pairs on permutations, *Journal of Integer Sequences* **12** (2009), Article 09.5.1, 19pp.

39. S. Kitaev, J. Liese, J. Remmel, B. Sagan: Rationality, irrationality, and Wilf equivalence in generalized factor order, *Electronic Journal of Combinatorics* **16(2)** (2009), #R22. Special volume in honor of Anders Björner on the occasion of his 60th birthday.

40. S. Kitaev: A survey on partially ordered patterns, In *Permutation Patterns* (2010), S. Linton, N. Ruškuc, and V. Vatter, Eds., vol. 376 of London Mathematical Society Lecture Note Series, Cambridge University Press, pp. 115–135.

41. S. Avgustinovich, A. Glen, B. V. Halldórsson, S. Kitaev: On shortest crucial words avoiding abelian powers, *Discrete Applied Mathematics* **158** (2010) 605–607. doi:10.1016/j.dam.2009.11.010

42. S. Kitaev, J. Remmel: Place-difference-value patterns: A generalization of generalized permutation and word patterns, *Integers: Electronic Journal of Combinatorial Number Theory* **10** (2010), A11, pp. 129–154.

43. S. Kitaev, A. Pyatkin: On avoidance of V- and $\Lambda-$patterns in permutations, *Ars Combinatoria* **97** (2010) 203–215.

44. M. Bousquet-Mélou, A. Claesson, M. Dukes, S. Kitaev: (2+2)-free posets, ascent sequences and pattern avoiding permutations, *J. of Combinatorial Theory – Series A* **117** (2010) 7, 884–909.

45. A. Claesson, S. Kitaev, K. Ragnarsson, B. E. Tenner: Boolean complexes for Ferrers graphs, *Australasian Journal of Combinatorics* **48** (2010) 159–173.

46. A. Glen, B. V. Halldórsson, S. Kitaev: Crucial abelian k-power-free words, *Discrete Mathematics and Theoretical Computer Science* **12** (2010) 5, 83–96.

47. S. Heubach, S. Kitaev: Avoiding substrings in compositions, *Congressus Numerantium* **202** (2010) 87–95.

48. A. Claesson, M. Dukes, S. Kitaev: A direct encoding of Stoimenow's matchings as ascent sequences, *Australasian Journal of Combinatorics* **49** (2011) 47–59.

49. A. Claesson, V. Jelinek, E. Jelinkova, S. Kitaev: Pattern avoidance in partial permutations, *Electronic Journal of Combinatorics* **18** (2011), #R25.

50. M. Dukes, S. Kitaev, J. Remmel, E. Steingrímsson: Enumerating (2+2)-free posets by indistinguishable elements, *Journal of Combinatorics* **2** (2011) 1, 139–163.

51. S. Avgustinovich, S. Kitaev, A. Pyatkin, A. Valyuzhenich: On square-free permutations, *Journal of Automata, Languages and Combinatorics* **16** (2011) 1, 3–10.

52. S. Kitaev, P. Salimov, C. Severs, H. Úlfarsson: Word-representability of line graphs, *Open Journal of Discrete Mathematics* **1** (2011) 2, 96–101.

53. S. Kitaev, J. Remmel: Enumerating (2+2)-free posets by the number of minimal elements and other statistics, *Discrete Applied Mathematics* **159** (2011) 2098–2108.

54. R. Ehrenborg, S. Kitaev, P. Perry: A spectral approach to consecutive pattern-avoiding permutations, *Journal of Combinatorics* **2** (2011) 305–353.

55. S. Kitaev, J. Remmel: Quadrant marked mesh patterns, *Journal of Integer Sequences* **15** (2012), Article 12.4.7, 29pp.

56. S. Kitaev, J. Remmel: Quadrant marked mesh patterns in alternating permutations, *Séminaire Lotharingien de Combinatoire* **B68a** (2012), 20 pp.

57. S. Avgustinovich, S. Kitaev, A. Valyuzhenich: Crucial and bicrucial permutations with respect to arithmetic monotone patterns, *Siberian Electronic Mathematical Reports* **9** (2012) 660–671.

58. S. Kitaev, J. Remmel, M. Tiefenbruck: Quadrant marked mesh patterns in 132-avoiding permutations, *Pure Mathematics and Applications* (*Pu.M.A.*) **23** (2012) 3, 219–256.

59. S. Avgustinovich, S. Kitaev, A. Valyuzhenich: Avoidance of boxed mesh patterns on permutations, *Discrete Applied Mathematics* **161** (2013) 43–51.

60. S. Kitaev, A. Niedermaier, J. Remmel, M. Riehl: Generalized pattern matching conditions for $C_k \wr S_n$, *ISRN Combinatorics*, Volume 2013, Article ID 634823, 21 pages.

61. S. Kitaev, J. Remmel, M. Riehl: On a pattern avoidance condition for the wreath product of cyclic groups with symmetric groups, *ISRN Combinatorics*, 2013, Article ID 806583, 17 pages.

62. S. Kitaev, J. Liese: Harmonic numbers, Catalan's triangle and mesh patterns, *Journal of Discrete Mathematics* **313** (2013) 1515–1531.

63. S. Kitaev, J. Remmel: Quadrant marked mesh patterns in alternating permutations II, *Journal of Combinatorics* **4** (2013) 1, 31–65.

64. A. Claesson, S. Kitaev, E. Steingrimsson: An involution on $\beta(1,0)$-trees, *Advances in Applied Mathematics* **51** (2013) 276–284.

65. S. Kitaev, P. Salimov, C. Severs, H. Úlfarsson: Restricted non-separable planar maps and some pattern avoiding permutations, *Discrete Applied Mathematics* **161** (2013), no. 16–17, 2514–2526.

66. A. Atminas, S. Kitaev, V. Lozin, A. Valyuzhenich: Universal graphs and universal permutations, *Discrete Mathematics, Algorithms and Applications* **5**, No. 4 (2013) 1350038 (15 pages).

67. S. Kitaev: On graphs with representation number 3, *Journal of Automata, Languages and Combinatorics* **18** (2013) 2, 97–112.

68. S. Kitaev, A. de Mier, M. Noy: On the number of self-dual rooted maps, *European Journal of Combinatorics* **35** (2014) 377–387.

69. S. Kitaev, J. Remmel: The 1-box pattern on pattern-avoiding permutations, *Journal of Integer Sequences* **17**, no. 3 (2014), Article 14.3.3, 19 pp..

70. S. Kitaev, A. de Mier: Enumeration of fixed points of an involution on $\beta(1,0)$-trees, *Graphs and Combinatorics* **30** (2014) 5, 1207–1221.

71. A. Claesson, S. Kitaev, A. de Mier: An involution on bicubic maps and $\beta(0,1)$-trees, *Australasian Journal of Combinatorics* **61** (2015) 1, 1–18.

72. R. Ehrenborg, S. Kitaev, E. Steingrímsson: Number of cycles in the graph of 312-avoiding permutations, *Journal of Combinatorial Theory – Series A* **129** (2015) 1–18.

73. P. Akrobotu, S. Kitaev, Z. Masárová: On word-representability of polyomino triangulations, *Siberian Advances in Mathematics* **25** (2015) 1, 1–10.

74. M. Jones, S. Kitaev, J. Remmel: Frame patterns in n-cycles, *Discr. Math.* **338** (2015) 1197–1215.

75. I. Gent, S. Kitaev, A. Konovalov, S. Linton, P. Nightingale: S-crucial and bicrucial permutations with respect to squares, *Journal of Integer Sequences* **18** (2015) 6, Article 15.6.5, 22 pp..

76. S. Kitaev, J. Remmel: (a,b)-rectangle patterns in permutations and words, *Discrete Applied Mathematics* **186** (2015) 128–146.

77. S. Kitaev, J. Remmel, M. Tiefenbruck: Quadrant marked mesh patterns in 132-avoiding permutations II, *Integers: Electronic Journal of Combinatorial Number Theory* **15** (2015) A16, 33 pp..

78. S. Kitaev, J. Remmel, M. Tiefenbruck: Quadrant marked mesh patterns in 132-avoiding permutations III, *Integers: Electronic Journal of Combinatorial Number Theory* **15** (2015) A39, 40 pp..

79. M. Jones, S. Kitaev, A. Pyatkin, J. Remmel: Representing graphs via pattern avoiding words, *Electronic Journal of Combinatorics* **22(2)** (2015), #P2.53, 20 pp..

80. S. Kitaev, V. Vajnovszki: Mahonian STAT on words, *Information Processing Letters* **116** (2016) 157–162.

81. S. Avgustinovich, S. Kitaev, V. Potapov, V. Vajnovszki: Gray coding cubic planar maps, *Theoretical Computer Science* **616** (2016) 59–69.

82. M. Halldórsson, S. Kitaev, A. Pyatkin: Semi-transitive orientations and word-representable graphs, *Discrete Applied Mathematics* **201** (2016) 164–171.

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84. A. L.L. Gao, S. Kitaev, P. B. Zhang: Pattern-avoiding alternating words, *Discrete Applied Mathematics* **207** (2016) 56–66.

85. T. Z. Q. Chen, S. Kitaev, B. Y. Sun: Word-representability of face subdivisions of triangular grid graphs, *Graphs and Combinatorics* **32** (2016) 1749–1761.

86. T. Z. Q. Chen, S. Kitaev, B. Y. Sun: Word-representability of triangulations of grid-covered cylinder graphs, *Discrete Applied Mathematics* **213** (2016) 60–70.

87. A. Collins, S. Kitaev, V. Lozin: New results on word-representable graphs, *Discrete Applied Mathematics* **216P1** (2017) 136–141.

88. S. Kitaev: Existence of u-representation of graphs, *Journal of Graph Theory* **85** (2017) 3, 661–668.

89. S. Kitaev, J. Remmel: A note on p-ascent sequences, *Journal of Combin.* **8** (2017) 3, 487–506.

90. M. Glen, S. Kitaev: Word-representability of triangulations of rectangular polyomino with a single domino tile, *Journal of Combinatorial Mathematics and Combinatorial Computing* **100** (2017) 131–144.

91. T. Z. Q. Chen, S. Kitaev, T. Mütze, B. Y. Sun: On universal partial words, *Discrete Mathematics & Theoretical Computer Science* **19(1)** (2017) #16.

92. A. L.L. Gao, S. Kitaev, P. B. Zhang: On 132-representable graphs, *Australasian Journal of Combinatorics* **69(1)** (2017) 105–118.

93. A. L.L. Gao, S. Kitaev, P. B. Zhang: On pattern avoiding indecomposable permutations, *Integers: Electronic Journal of Combinatorial Number Theory* **18** (2018) A2, 23 pp..

94. S. Kitaev, A. Pyatkin: Graphs representable by words: a survey of results, *Diskretny Analiz i Issledovanie Operacii* **25** (2018) 2, 19–53, in Russian. Translation: Word-Representable Graphs: a Survey, *Journal of Applied and Industrial Mathematics* **12** (2018) 2, 278–296.

95. M. Glen, S. Kitaev, A. Pyatkin: On the representation number of a crown graph, *Discrete Applied Mathematics* **244** (2018) 89–93.

96. A. L.L. Gao, S. Kitaev, W. Steiner, P. B. Zhang: On a greedy algorithm to construct universal cycles for permutations, *International Journal of Foundations of Computer Science*, to appear.

97. G.-S. Cheon, J. Kim, M. Kim, S. Kitaev, A. Pyatkin: On k-11-representable graphs, *Journal of Combinatorics*, to appear.

Preprints

98. S. Kitaev, V. Potapov, V. Vajnovszki: On shortening u-cycles and u-words for permutations.

99. S. Kitaev, Y. Long, J. Ma, H. Wu: Word-representability of split graphs.

100. G.-S. Cheon, J.-H. Jung, S. Kitaev, S.A. Mojallal: Riordan graphs I: Structural properties.

101. G.-S. Cheon, J.-H. Jung, S. Kitaev, S.A. Mojallal: Riordan graphs II: Spectral properties.

102. Ö. Akgün, I. P. Gent, S. Kitaev, H. Zantema: Solving computational problems in the theory of word-representable graphs.

103. S. Kitaev, P. B. Zhang: Distributions of mesh patterns of short lengths.

Conference proceedings and abstracts

104. S. Kitaev: Crucial words for the sets of non-repetitive words, Proceedings of the XXXIV International Scientific Conference "Student and Scientific-Technical Progress", Novosibirsk, Russia (1996), 35–36.

105. S. Kitaev: On crucial words for some sets of prohibitions, Proceed. of the IX Intern. School-Seminar "Synthesis and Complexity of Management Systems", Nignii Novgorod, Russia (1998).

106. S. Kitaev: On a property of the Arshon sequence, Problems of Theoretical Cybernetics, Thesis of the Talks on the XII International Conference held in Nignii Novgorod, Russia (1999).

107. S. Kitaev: On non-existence of morphisms defining symbolic sequences, Proceedings of the XXXVII International Scientific Conference "Student and Scientific-Technical Progress", Novosibirsk, Russia (1999), p. 64.

108. S. Kitaev: On pattern avoidance, the Fifth Youth Scientific School in Discrete Mathematics and its Applications, Moscow St. University, Moscow (2001).

109. S. Kitaev: Partially ordered generalized patterns, Proceedings of the 14th International Conference on Formal Power Series & Algebraic Combinatorics, the University of Melbourne, Melbourne, Australia, July 8–12 (2002).

110. S. Kitaev: Independent sets on path-schemes, Proceedings of Conference on Discrete Analysis and Operations Research (DAOR'2004), Sobolev Institute of Mathematics, Novosibirsk State University, Novosibirsk, Russia, June 28 – July 2 (2004), p. 88.

111. A. Burstein, S. Kitaev: Partially ordered generalized patterns and their combinatorial interpretation, *The Third International Conference on Permutation Patterns*, the University of Florida, Gainesville, Florida, March 7–11, (2005).

112. S. Kitaev: Introduction to partially ordered patterns, Workshop on Permutation Patterns, University of Haifa, Israel, May 29–June 3, 2005.

113. S. Kitaev, J. Remmel: Classifying descents according to equivalence mod k, *Permutation Patterns Conference 2006*, Reykjavík University, Reykjavík, Iceland, June 12–16 (2006).

114. R. Ehrenborg, S. Kitaev, P. Perry: A spectral approach to pattern-avoiding permutations, Proceedings of the *18th International Conference on Formal Power Series & Algebraic Combinatorics*, the University of California, San Diego, USA, June 19–23 (2006).

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117. S. Kitaev, T. Mansour, P. Séébold: Counting ordered patterns in words generated by morphisms, Pre-proceedings of the *2nd International Conference on Language and Automata Theory and Applications* (*LATA*), Tarragona, Spain, March 13–19 (2008), 301–312.

118. A. Claesson, S. Kitaev: Classification of bijections between 321- and 132-avoiding permutations. Proceedings of the *20th International Conference on Formal Power Series & Algebraic Combinatorics*, Valparaiso, Chile, June 23–27 (2008).

119. M. Bousquet-Mélou, A. Claesson, M. Dukes, S. Kitaev: Unlabeled (2+2)-free posets, ascent sequences and pattern avoiding permutations, *Discrete Math. Theor. Comput. Sci. Proc. AK* (2009) 216–228. Proceedings of the *21st International Conference on Formal Power Series & Algebraic Combinatorics*, Hagenberg, Austria, July 20–24 (2009).

120. S. Kitaev, J. Liese, J. Remmel, B. Sagan: Rationality, irrationality, and Wilf equivalence in generalized factor order, *Discrete Math. Theor. Comput. Sci. Proc. AK* (2009) 515–526. Proceedings of the *21st International Conference on Formal Power Series & Algebraic Combinatorics*, Hagenberg, Austria, July 20–24 (2009).

121. A. Glen, B. V. Halldórsson, S. Kitaev: Crucial words for abelian powers, V. Diekert, D. Nowotka (Eds.): *Lecture Notes in Comp. Sci.* **5583** (2009) 264–275. Proceedings of the *13th Conference on Developments in Language Theory*, DLT 2009, Stuttgart, Germany, June 30 – July 3, 2009.

122. S. Kitaev, J. Remmel: Enumerating (2+2)-free posets by the number of minimal elements and other statistics. *Discrete Math. Theor. Comput. Sci. Proc. AK* (2010) 689–700. Proceedings of the *22nd International Conference on Formal Power Series & Algebraic Combinatorics*, San Francisco State University, San Francisco, USA, August 2–6 (2010).

123. A. Claesson, V. Jelinek, E. Jelinkova, S. Kitaev: Pattern avoidance in partial permutations. *Discrete Math. Theor. Comput. Sci. Proc. AK* (2010) 493–504. Proceedings of the *22nd International Conference on Formal Power Series & Algebraic Combinatorics*, San Francisco State University, San Francisco, USA, August 2–6 (2010).

124. M. Halldórsson, S. Kitaev, A. Pyatkin: Graphs capturing alternations in words, Y. Gao, H. Lu, S. Seki, S. Yu (Eds.): *Lecture Notes in Computer Science* **6224** (2010) 436–437. Proceedings of the *14th Conference on Developments in Language Theory*, DLT 2010, London, Ontario, Canada, August 17–20, 2010.

125. S. Kitaev, P. Salimov, C. Severs, H. Úlfarsson: On the representability of line graphs, *Lecture Notes in Computer Science* **6795** (2011) 478–479. Proceedings of the *15th Conference on Developments in Language Theory*, DLT 2011, University of Milano-Bicocca, Milan, Italy, July 19–22, 2011.

126. M. Halldórsson, S. Kitaev, A. Pyatkin: Alternation graphs, *Lecture Notes in Computer Science* **6986** (2011) 191–202. Proceedings of the *37th International Workshop on Graph-Theoretic Concepts in Computer Science*, WG 2011, Teplá Monastery, Czech Republic, June 21–24, 2011.

127. S. Avgustinovich, S. Kitaev, A. Valyuzhenich: On permutation boxed mesh patterns, *Permutation Patterns Conference*, Strathclyde University, Glasgow, June 11–15 (2012).

128. R. Ehrenborg, S. Kitaev, E. Steingrímsson: Number of cycles in the graph of 312-avoiding permutations. *Discrete Math. Theor. Comput. Sci. Proc. AK* (2014) 37–48. Proceedings of the *26th International Conference on Formal Power Series & Algebraic Combinatorics*, Chicago, Illinois, USA, June 29–July 3 (2014).

129. S. Kitaev: Word-representable graphs and permutation patterns, Plenary talk at *Permutation Patterns Conference*, East Tennessee State University, Johnson City, TN, July 7–11 (2014).

130. H. Chen, S. Kitaev, T. Mütze, B. Sun: On universal partial words, *European Conference on Combinatorics, Graph Theory and Applications* (*Eurocomb*) 2017, Vienna, August 28 – September 1, 2017. *Electronic Notes in Discrete Mathematics* **61** (2017) 231–237.

131. S. Kitaev: A Comprehensive Introduction to the Theory of Word-Representable Graphs, *Lecture Notes in Computer Science* **10396** (2017) 36–67.

Miscellaneous

132. S. Kitaev: Review of "Enumerative Combinatorics" by Charalambos A. Charalambides published by *Chapman & Hall/CRC*, ISBN L-58488-290-5, Hard Cover, 609 pages, *The Book Review Column* edited by William Gasarch, Vol 39, No 4 (2008).

133. S. Kitaev: Generalized Patterns in Words and Permutations, Ph.D. thesis (2003).

134. S. Kitaev: Symbolic Sequences, Crucial Words and Iterations of a Morphism, thesis for the Degree of Licentiate of Philosophy (2000).

135. S. Kitaev: Crucial words for some sets of prohibitions, M.Sc. thesis (1998), in Russian.

136. S. Kitaev: Crucial words, B.Sc. thesis (1996), in Russian.

Unpublished

137. S. Kitaev, T. Mansour: A survey of certain pattern problems, preprint (2003).

Presentations held

163. The role of computer experiments in the theory of word-representable graphs, Algorithms and Complexity Seminar, *Durham University*, Durham, UK, October 25, 2018

162. Encoding graphs by Words and Patterns, Invited talk at the 2nd IMA Conference on Theoretical and Computational Discrete Mathematics, *University of Derby*, Derby, UK, September 14, 2018

161. Equidistributions on planar maps via involutions on description trees, Colloquium talk, *Yokohama City University*, Japan, August 7, 2018

160. New directions of research on Riordan graphs and Riordan matrices, Invited talk at the 5*th International Conference on Riordan Arrays and Related Topics* (5*RART*), Busan, Korea, June 29, 2018

159. To the Memory of Jeff Remmel, my Collaborator and Friend, Discrete Analysis Seminar, *Sobolev Institute of Mathematics*, Novosibirsk, Russia, June 22, 2018

158. An Introduction to the Theory of Word-Representable Graphs, *Tianjin University of Technology*, Tianjin, China, April 13, 2018

157. To the Memory of Jeff Remmel, my Collaborator and Friend, Centre for Combinatorics, *Nankai University*, Tianjin, China, April 9, 2018

156. An introduction to the theory of word-representable graphs, Colloquium talk, *Nihon University*, Japan, February 21, 2018

155. To the Memory of Jeff Remmel, my Collaborator and Friend, Combinatorics Seminar, *University of Strathclyde*, January 25, 2018

154. Counting independent sets in graphs, Applied Algebra & Optimization Research Center Seminar, *Sungkyunkwan University*, Korea, November 29, 2017

153. Encoding independent sets of Ferrers graphs by 1s in binary matrices, Applied Algebra & Optimization Research Center seminar, *Sungkyunkwan University*, Korea, November 29, 2017

152. To the Memory of Jeff Remmel, my Collaborator and Friend, Applied Algebra & Optimization Research Center seminar, *Sungkyunkwan University*, Korea, November 28, 2017

151. Interval orders and a hierarchy of combinatorial structures related to them, Invited talk, Applied Algebra & Optimization Research Center seminar, *Sungkyunkwan University*, Korea, September 15, 2017

150. Introduction to the theory of word-representable graphs, Invited lecture, One-Day Meeting in Combinatorics, *Sungkyunkwan University*, Korea, September 13, 2017

149. What is a good bijection? A case study on pattern-avoiding permutations, Department of Mathematics Colloquium, *Sungkyunkwan University*, Korea, September 7, 2017

148. Word-representability of split graphs, Special Lecture, Applied Algebra & Optimization Research Center seminar, *Sungkyunkwan University*, Korea, September 4, 2017

147. A comprehensive introduction to the theory of word-representable graphs, Invited Speaker at the *21st International Conference on Developments in Language Theory* (*DLT 2017*), University of Liége, Liége, Belgium, August 7, 2017

146. Word-representable graphs, Discrete Analysis Seminar, *Sobolev Institute of Mathematics*, Novosibirsk, Russia, August 4, 2017

145. On a greedy algorithm to construct universal cycles for permutations, joint Algebraic Combinatorics and Coding Theory Seminars, *Sobolev Institute of Mathematics*, Novosibirsk, Russia, July 18, 2017

144. Crown graphs and their representation numbers, *26th British Combinatorial Conference*, Glasgow, UK, July 3, 2017

143. Universal partial words, DIMAP Seminar, Centre for Discrete Mathematics and its Applications, *University of Warwick*, Coventry, UK, June 13, 2017

142. Semi-transitive orientations as the main tool in the theory of word-representable graphs discovered so far, Shanghai Center for Mathematical Sciences, *Fudan University*, Shanghai, China, April 25, 2017

141. Word-representable graphs. The basics, Shanghai Center for Mathematical Sciences, *Fudan University*, Shanghai, China, April 24, 2017

140. Semi-transitive orientations as the main tool in the theory of word-representable graphs discovered so far, *Shanghai Jiao Tong University*, Shanghai, China, April 21, 2017

139. Word-representable graphs. The basics, *Shanghai Jiao Tong University*, Shanghai, China, April 21, 2017

138. Universal partial words, Centre for Combinatorics, *Nankai University*, Tianjin, China, April 17, 2017

137. Universal partial words, Invited talk at the 2017 AORC Open School on Combinatorial Methods in the Analysis of Algorithm and Data Structures, *Sungkyunkwan University*, Korea, February 22, 2017

136. Universal cycles and universal words as a generalization of de Bruijn sequences, Invited talk at the 2017 AORC Open School on Combinatorial Methods in the Analysis of Algorithm and Data Structures, *Sungkyunkwan University*, Korea, February 22, 2017

135. A far-reaching generalization of word-representable graphs: The theory of graphs representable by pattern avoiding words, Invited talk at the 2017 AORC Open School on Combinatorial Methods in the Analysis of Algorithm and Data Structures, *Sungkyunkwan University*, Korea, February 21, 2017

134. Semi-transitive orientations as the main tool in the theory of word-representable graphs discovered so far, Invited talk at the 2017 AORC Open School on Combinatorial Methods in the Analysis of Algorithm and Data Structures, *Sungkyunkwan University*, Korea, February 20, 2017

133. Word-representable graphs. The basics, Invited talk at the 2017 AORC Open School on Combinatorial Methods in the Analysis of Algorithm and Data Structures, *Sungkyunkwan University*, Korea, February 20, 2017

132. On universal partial words, Combinatorics seminar, *University of Strathclyde*, UK, February 1, 2017

131. On a hierarchy of combinatorial structures related to interval orders, Combinatorics seminar, *University of Bourgogne*, Dijon, November 8, 2016

130. On universal partial words, Combinatorics seminar, *University of Bourgogne*, Dijon, November 7, 2016

129. What is a good bijection? A case study on pattern-avoiding permutations, Computer and Information Sciences Departmental Seminar, *University of Strathclyde*, UK, October 12, 2016

128. Partial universal words for de Bruijn sequences, Coding Theory Seminar, *Sobolev Institute of Mathematics*, Novosibirsk, Russia, July 5, 2016

127. On a hierarchy related to interval orders, Centre for Combinatorics, *Nankai University*, Tianjin, China, November 27, 2015

126. Equidistributions on planar maps and description trees, Centre for Combinatorics Seminar, *Nankai University*, Tianjin, China, July 10, 2015

125. Representing Graphs via Pattern-Avoiding Words, Quasi-Groups and Related Topics Seminar, *Sobolev Institute of Mathematics*, Novosibirsk, Russia, June 26, 2015

124. Encoding graphs via pattern-avoiding words, Combinatorics seminar, *University of Bourgogne*, Dijon, June 8, 2015

123. Equidistributions on planar maps via involutions on description trees, Combinatorics seminar, *University of Bourgogne*, Dijon, June 8, 2015

122. Encoding graphs via pattern-avoiding words, Invited talk at Scottish Combinatorics Meeting, *University of Glasgow*, Glasgow, April 29, 2015

121. Representing graphs via pattern avoiding words, Centre for Combinatorics Seminar, *Nankai University*, Tianjin, China, November 26, 2014

120. New results and research directions in the theory of word-representable graphs, Combinatorics Seminar, *University of California*, San Diego, July 16, 2014

119. Word-representable graphs and permutation patterns, Plenary talk at Permutation Patterns Conference 2014, *East Tennessee State University*, Johnson City, TN, USA, July 8, 2014.

118. Word-representability of triangulations of polyominoes, Quasi-Groups and Related Topics Seminar, *Sobolev Institute of Mathematics*, Novosibirsk, Russia, July 4, 2014

117. On fixed points of an automorphism on bicubic maps, Factorial Languages Seminar, *Sobolev Institute of Mathematics*, Novosibirsk, Russia, July 2, 2014

116. Word-representable graphs, Mathematically Structured Programming Group's Seminar, *University of Strathclyde*, UK, January 15, 2014

115. Equidistributions on planar maps via involutions on description trees, DIMAP Seminar, Centre for Discrete Mathematics and its Applications, *University of Warwick*, Coventry, UK, November 19, 2013

114. On a hierarchy related to interval orders, CIRCA seminar, *University of St Andrews*, St Andrews, UK, May 15, 2013

113. A hierarchy related to interval orders, Formal Analysis, Theory and Algorithms, *University of Glasgow*, Glasgow, UK, April 16, 2013

112. Two involutions on description trees and their applications, Colloquium talk, *University of California*, San Diego, January 17, 2013

111. Harmonic numbers, Catalan's triangle and mesh patterns, Combinatorics Seminar, *University of California*, San Diego, January 15, 2013

110. Crucial and bicrucial permutations with respect to arithmetic monotone patterns, Invited talk at the AMS Special Session on Patterns in Permutations and Words, at San Diego AMS-MAA Joint Meetings, San Diego, January 12, 2013

109. Interval orders and related structures, Applied Analysis Seminar, *University of Strathclyde*, November 20, 2012

108. Harmonic numbers, Catalan's triangle and mesh patterns, Factorial Languages Seminar, *Sobolev Institute of Mathematics*, Novosibirsk, Russia, August 13, 2012

107. An involution on planar maps and $\beta(0,1)$-trees, Discrete Analysis Seminar, *Sobolev Institute of Mathematics*, Novosibirsk, Russia, August 9, 2012

106. On permutation boxed mesh patterns, Permutation Patterns Conference 2012, *University of Strathclyde*, Glasgow, UK, June 11, 2012

105. Graphs representable by words, DIMAP Seminar, Centre for Discrete Mathematics and its Applications, *University of Warwick*, Coventry, UK, May 1, 2012

104. On interval orders and related objects, Colloquium talk, Department of Mathematics, *California Polytechnic State University*, San Luis Obispo, February 17, 2012

103. Interval orders and related combinatorial objects, Colloquium talk, *University of California*, San Diego, February 16, 2012

102. On permutation boxed mesh patterns, Combinatorics Seminar, *University of California*, San Diego, February 14, 2012

101. (2+2)-free posets and related objects, Statistics Seminar, *Lancaster University*, Lancaster, UK, December 8, 2011

100. On graphs representable by words, Pure Maths Colloquia, *University of St Andrews*, St Andrews, UK, November 24, 2011

99. Word-representation of graphs, Formal Analysis, Theory and Algorithms Seminar, *University of Glasgow*, Glasgow, UK, November 22, 2011

98. On graphs representable by words, Algorithms and Complexity Seminar, *Durham University*, Durham, UK, October 20, 2011

97. On word-representable graphs, Mathematical Models of Decision Making Seminar, *Sobolev Institute of Mathematics*, Novosibirsk, Russia, August 15, 2011

96. Graphs representable by words, Discrete Analysis Seminar, *Sobolev Institute of Mathematics*, Novosibirsk, Russia, July 7, 2011

95. Planar maps, Coding Theory Seminar, *Sobolev Institute of Math.*, Novosibirsk, Russia, July 5, 2011

94. On (2+2)-free posets and equinumerous objects, DIMAP Workshop on Combinatorics and Graph Theory, *University of Warwick*, UK, April 4, 2011

93. Graphs representable by words, Colloquium talk, Department of Mathematics, *California Polytechnic State University*, San Luis Obispo, February 18, 2011

92. Planar maps and description trees, Combinatorics Seminar, *University of California*, San Diego, February 16, 2011

91. On graphs representable by words, Combinatorics, Graph Theory and Applications Seminar, *Universitat Politecnica de Catalunya*, Barcelona, Spain, November 25, 2010

90. Interval orders and equinumerous objects, Combinatorics, Graph Theory and Applications Seminar, *Universitat Politecnica de Catalunya*, Barcelona, Spain, October 7, 2010

89. On representable graphs, *University of Strathclyde*, Glasgow, Scotland, September 9, 2010

88. Enumerating (2+2)-free posets by the number of minimal elements and other statistics, Poster at the 22nd International Conference on Formal Power Series & Algebraic Combinatorics, *San Francisco State University*, San Francisco, USA, August 2–6 (2010).

87. On (2+2)-free posets, Factorial Languages Seminar, *Sobolev Institute of Mathematics*, Novosibirsk, Russia, July 13, 2010

86. Counting (2+2)-free posets by indistinguishable elements and a conjecture of Jovovic, ICE-TCS Theory Day 2010, *Reykjavík University*, Reykjavík, April 30, 2010

85. Snake-in-the-box problem, Graph and Algorithms Seminar, *Reykjavík Univ.*, Reykjavík, March 25, 2010

84. Finally, we can count 2+2!, Reykjavík University Lecture Marathon 2010, *Reykjavík University*, Reykjavík, March 19, 2010

83. Binary uniform distributions on graphs, Graph and Algorithms Seminar, *Reykjavík University*, Reykjavík, February 25, 2010

82. On (2+2)-free posets, *Jagiellonian University in Krakow*, Krakow, Poland, February 5, 2010

81. Combinatorial methods, *Nowy Sacz School of Business*, Teaching Staff Mobility Programme, Nowy Sacz, Poland, February 3, 2010

80. Enumerating (2+2)-free posets by the number of minimal elements and other statistics, *Nowy Sacz School of Business*, Nowy Sacz, Poland, February 3, 2010

79. Pattern avoidance in permutations and $\beta(1,0)$-trees, Mathematics Department Colloquium, *California State University*, Los Angeles, January 20, 2010

78. Pattern avoidance on partial permutations, Combinatorics Seminar, *University of California*, San Diego, January 19, 2010

77. Enumerating (2+2)-free posets by the number of minimal elements and other statistics, Invited talk at the AMS Special Session on Enumerative Combinatorics at San Francisco AMS-MAA Joint Meetings, San Francisco, January 15, 2010

76. Decompositions and statistics for beta(1,0)-trees and nonseparable permutations, Colloquium talk, Department of Mathematics, *California Polytechnic State University*, San Luis Obispo, January 12, 2010

75. Enumeration of (2+2)-free posets by the number of minimal elements and other statistics, ICE-TCS Lectures Series, *Reykjavík University*, Reykjavík, October 16, 2009

74. From squares in words to squares in permutations, Conference "Mathematics in Iceland 2009," Leirubakki, Iceland, September 19, 2009

73. Crucial words for abelian powers, 13th International Conference on Developments in Language Theory (DLT 09), *Universität Stuttgart*, Germany, July 2, 2009

72. A lower bound for the shortest length of a crucial word avoiding abelian powers, Factorial Languages Seminar, *Sobolev Institute of Mathematics*, Novosibirsk, Russia, May 11, 2009

71. (2+2)-free posets and equinumerous objects, Factorial Languages Seminar, *Sobolev Institute of Mathematics*, Novosibirsk, Russia, April 27, 2009

70. Crucial words for abelian k-th powers, Factorial Languages Seminar, *Sobolev Institute of Mathematics*, Novosibirsk, Russia, April 20, 2009

69. (2+2)-free posets and related objects, Combinatorics and Sequences Seminar, *Sobolev Institute of Mathematics*, Novosibirsk, Russia, April 15, 2009

68. (2+2)-free posets, ascent sequences, regular linearized chord diagrams, and pattern avoiding permutations, Special Discrete Mathematics Seminar, *University of California*, Berkeley, March 18, 2009

67. Graphs represented by words, Combinatorics Seminar, *Univ. of California*, San Diego, March 17, 2009

66. Crucial words for abelian powers, Combinatorics Seminar, *Univ. of California*, San Diego, March 3, 2009

65. Interval orders, pattern avoiding permutations, and involutions with no neighbor nesting, Discrete Math Seminar, *Arizona State University*, Tempe, March2, 2009

64. Unlabeled (2+2)-free posets, ascent sequences, regular linearized chord diagrams, and pattern avoiding permutations, Mathematics Department Colloquium, *California State University*, Los Angeles, February 25, 2009

63. Permutations, sequences, and partially ordered sets, Combinatorics Seminar, *University of California*, San Diego, February 10, 2009

62. Restricted permutations and beta(1,0)-trees, Combinatorics Seminar, *California Institute of Technology*, Pasadena, February 5, 2009

61. Generalized pattern avoidance, beta(1,0)-trees, and 2-stack sortable permutations, Combinatorics Seminar, *University of California*, San Diego, January 27, 2009

60. On uniquely k-determined permutations, Combinatorics Seminar, *Reykjavík University*, Reykjavík, October 17, 2008

59. On Generalized Factor Order on Words, ICE-TCS Theory Day, *Reykjavík University*, Reykjavík, May 30, 2008

58. Enumerating independent sets in path-schemes and grid graphs, Graph and Algorithms Seminar, *Reykjavík University*, Reykjavík, May 21, 2008

57. Cutting cycles in de Bruijn graphs, Graph and Algorithms Seminar, *Reykjavík University*, Reykjavík, April 9, 2008

56. Counting ordered patterns in words generated by morphisms, 2nd International Conference on Language and Automata Theory and Applications (LATA 2008), Tarragona, Spain, March 18, 2008

55. Ordered patterns in words generated by morphisms, ICE-TCS seminar, *Reykjavík University*, Reykjavík, February 15, 2008

54. Bijections between 321- and 132-avoiding permutations, ICE-TCS seminar, *Reykjavík University*, Reykjavík, December 19, 2007

53. Sequences and morphisms, Pure Mathematics Colloquium, *University of St Andrews*, St Andrews, Scotland, October 25, 2007

52. Generalized pattern avoidance and two-stack sortable permutations, Discrete Analysis Seminar, *Sobolev Institute of Mathematics*, Novosibirsk, Russia, July 12, 2007

51. Generalized pattern avoidance, $\beta(1,0)$-trees, and two-stack sortable permutations, Permutation Patterns Conference 2007, *University of St Andrews*, St Andrews, Scotland, UK, June 12, 2007

50. Non-attacking placements on chessboards, *University of Iceland*, Reykjavík, February 22, 2007

49. On universal cycles and combinatorial objects, ICE-TCS colloquium talk, *Reykjavik University*, Reykjavik, February 2, 2007

48. On representable graphs, ICE-TCS seminar, *Reykjavík University*, Reykjavík, January 12, 2007

47. Representable graphs, Combinatorics Seminar, *University of California, San Diego*, November 14, 2006

46. Differential equations and permutation patterns, Special PDE and Combinatorics Seminar, *University of Kentucky*, Lexington, November 10, 2006

45. Universal cycles and combinatorial objects, Colloquium Lecture, *University of Kentucky*, Lexington, November 9, 2006

44. Uniquely k-determined permutations, the ICE-TCS seminar, *Reykjavik University*, Reykjavik, Iceland, September 20, 2006

43. Combinatorial patterns, Factorial Languages Seminar, *Sobolev Institute of Mathematics*, Novosibirsk, Russia, August 7, 2006

42. Classifying descents according to equivalence mod k, Permutation Patterns Conference 2006, *Reykjavík University*, Reykjavík, Iceland, June 12, 2006

41. An introduction to permutation patterns, The second ICE-TCS Symposium, *University of Iceland*, Reykjavík, Iceland, May 31, 2006

40. Patterns and their generalizations, the Department of Informatics Seminar, the *University of Bergen*, Bergen, Norway, March 2, 2006

39. Enumerating patterns in compositions, the ICE-TCS seminar, *Reykjavik Univ.*, Reykjavik, Feb 10, 2006

38. Introduction to partially ordered patterns, the *University of Iceland*, Reykjavík, October 20, 2005

37. Patterns and their generalizations, the *University of Iceland*, Reykjavík, October 13, 2005

36. Sets of prohibitions and some problems related to them, the ICE-TCS seminar, *Reykjavík University*, Reykjavík, October 7, 2005

35. On a common feature in three famous sequences, ICE-TCS seminar, *Reykjavík University*, Reykjavík, September 1, 2005

34. Introduction to partially ordered patterns, Combinatorics Seminar, *University of California, San Diego*, April 26, 2005

33. Independent sets in graphs: Enumeration and connections to other combinatorics, Combinatorics Seminar, *Chalmers/GU*, Göteborg, Sweden, February 3, 2005

32. Partially ordered patterns, *Institut Mittag-Leffler*, Stockholm, Sweden, February 1, 2005

31. Partially ordered patterns and their relations to other combinatorial objects, Combinatorics Seminar, *University of Louisville*, Louisville, November 23, 2004

30. Walks in the positive quadrant and pattern avoidance in permutations, Combinatorics Seminar, *University of Kentucky*, Lexington, October 18, 2004

29. Independent sets on path-schemes, Conference on Discrete Analysis and Operations Research (DAOR'2004), *Sobolev Institute of Mathematics*, Novosibirsk, Russia, July 1, 2004

28. Combinatorics on words and graphs, Rocky Mountain Algebraic Combinatorics Seminar, *Colorado State University*, Fort Collins, May 7, 2004

27. Sequences and iterations of morphisms, Combinatorics Seminar, *University of Louisville*, Louisville, March 23, 2004

26. Non-overlapping patterns in permutations and words, Combinatorics Seminar, *University of California, San Diego*, March 5, 2004

25. Numerical characteristics of unavoidable sets, Combinatorics Seminar, *California Institute of Technology*, Pasadena, March 4, 2004

24. The Dragon curve, the Peano curve, and combinatorics on words, PIC Special Research Seminar at *University of California, Los Angeles*, March 3, 2004

23. Unavoidable sets and their numerical characteristics, Combinatorics Seminar, *University of Illinois at Chicago*, Chicago, February 25, 2004

22. On a common feature in certain sequences, Combinatorics Seminar, *University of Illinois at Urbana-Champaign*, Urbana, February 24, 2004

21. On some famous sequences, Combinatorics Seminar, *Massachusetts Institute of Technology*, Cambridge, February 20, 2004

20. Non-overlapping patterns in permutations, Combinatorics Seminar, *University of Pennsylvania*, Philadelphia, February 19, 2004

19. Unavoidable sets of word patterns and universal cycles, Discrete Analysis Seminar, *Sobolev Institute of Mathematics*, Novosibirsk, Russia, January 8, 2004

18. A survey of certain pattern problems, Discrete Analysis Seminar, *Sobolev Institute of Mathematics*, Novosibirsk, Russia, December 25, 2003

17. On unavoidable sets, universal cycles and word patterns, Combinatorics Seminar, *Chalmers/GU*, Göteborg, Sweden, December 9, 2003

16. On Some of Aspects of Combinatorics on Words, Colloquia Lecture, *Iowa State University*, Ames, October 21, 2003

15. On 2-separated paths in the n-cube, ISU Combinatorics and Algebra Seminar, *Iowa State University*, Ames, October 20, 2003

14. Symbolic sequences, crucial words and iterations of a morphism, Combinatorics Seminar, *University of Kentucky*, Lexington, September 15, 2003

13. Non-attacking placements on chessboards, Combinatorics Seminar, *Chalmers/GU*, Göteborg, Sweden, May 27, 2003

12. Partially Ordered Generalized Patterns, Poster at the 14th International Conference on Formal Power Series & Algebraic Combinatorics (FPSAC'02), *University of Melbourne*, Melbourne, Australia, July 8–12, 2002

11. Simultaneous Avoidance of Generalized Patterns, Workshop "Algebraic Combinatorics," *Royal Institute of Technology*, Stockholm, Sweden, May 21–22, 2002

10. Multi-Avoidance of Generalized Patterns, The 48th Seminaire Lotharingien de Combinatoire, Domaine Saint-Jacques, France, 2002

 9. Completeness and complexity of some extremal problems for sets of prohibited words, Combinatorics Seminar, *Chalmers/GU*, Göteborg, Sweden, September 26, 2001

 8. On non-existence of an iterative morphism which defines an Arshon sequence, Swedish-Russian conference "Combinatorics, Dynamics, Probabilities", *Royal Institute of Technology*, Stockholm, Sweden, October 3–7, 2000

 7. The involution principle and the Rogers-Ramanujan identities, Combinatorics Seminar, *Chalmers*, Göteborg, Sweden, May 8, 2000

 6. On Non-Existence of Morphisms that Define the Symbolic Sequences, The XXXVII International Scientific Conference "Student and Scientific-Technical Progress", *Novosibirsk State University*, Novosibirsk, Russia, 1999 (A Diploma)

 5. On a Property of the Arshon Sequence, Problems of Theoretical Cybernetics, The XII International Conference, *Nignii Novgorod State University*, Nignii Novgorod, Russia, 1998

 4. Crucial Words for the Sets of Words Avoiding Abelian Squares, The First Youth Scientific School in Discrete Mathematics and its Applications, *Moscow State University*, Moscow, Russia, 1997

 3. Crucial Words for the Sets of Non-Repetitive Words, The XXXIV International Scientific Conference "Student and Scientific-Technical Progress", *Novosibirsk State University*, Novosibirsk, Russia, 1996 (A Diploma)

 2. Coloring beads, The XXIV Conference of Omsk Scientific-Oriented Student Society "Search" (section of algebra), Omsk, Russia, 1992

 1. Arithmetical progressions and colouring beads, The XXX International Scientific Conference "Student and Scientific-Technical Progress", *Novosibirsk State University*, Novosibirsk, Russia, 1992 (A Diploma)