

Curriculum Vitae - Sergey Kitaev

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Education

2003: **PhD in Mathematics**, Gothenburgh University; "Generalized patterns in words and permutations"

1998: **M.Sc. in Applied Mathematics and Informatics**, Novosibirsk State University

1996: **B.Sc. in Mathematics** (A Diploma), Novosibirsk State University

Employment

2022-now: **Professor**; since 2021 **Associate Dean (Research)**, Faculty of Science, University of Strathclyde
Head, Mathematical and Stochastic Analysis Group; **co-Head**, Applied and Discrete Analysis Group

2011-2022: **Reader**, University of Strathclyde

2006-2011: **Associate Professor of Mathematics**, Reykjavik University

2005-2006: **Assistant Professor of Mathematics**, Reykjavik University

2005: **Visiting Assistant Professor**, University of California, San Diego

2003-2004: **Visiting Assistant Professor**, University of Kentucky

Research leadership

I am the author of **177 publications** including **134 peer-reviewed journal articles** in **Combinatorics, Graph Theory, Algebra, Discrete Mathematics, and Formal Language Theory**. However, my research leadership is better demonstrated by me being the author of the **only comprehensive book** published by *Springer* about a fast growing research area, with hundreds of researchers around the globe actively involved, and about two thousand papers published to date. I am an **international leader** in this field that has numerous applications in various branches of mathematics, computer science, biology and theoretical physics. Moreover, **my other book** published by *Springer* introduces the reader to a theory **I have pioneered alone**, a field enjoying ever greater attention by other researchers, and with the ultimate goal of finding applications for analysis of algorithms on graphs and robot scheduling. As an internationally recognised scientist, I have been the **chair of organising committees** of several international conferences/symposia/workshops, most notably the **British Combinatorial Conference** in 2017, probably the **world's most prestigious** general conference in Combinatorics. Also, I am a *reviewer* for **Math Reviews (130 reviews)** and I have done referee work for **54 journals**. I have given **250+ talks** for various audiences.

I am cited **2952** times on Google Scholar (as of **April 2024**); **h-index** is **27**. I am listed among the **most cited mathematicians** based on graduation year: sites.google.com/view/mathematiciancitations/home

I have been a **reviewer** for *EPSRC, NSA Math. Sciences Grant Program, French Nat. Research Agency (ANR), Austrian Sci. Fund (FWF), Russian Science Found., Ministry of Education and Science of Russian Federation, and South Africa's National Research Found. (NRF)*

Research monographs and books edited

S. Kitaev. Patterns in permutations and words. *Springer*, 2011 (**516 pages**)

S. Kitaev, V. Lozin. Words and graphs. *Springer*, 2015 (**282 pages**)

Surveys in Combinatorics 2017. Edited by Claesson et al., *Cambridge University Press*, 2017

Permutation Patterns 2012 Special Issue of "Pure Math. & Appl.". Edited by Claesson and **Kitaev**, 2012

Plenary/invited talks

Virt. Workshop on Comb. Species, Operads, Riordan Arrays and Related Topics, Sung. Uni, Korea, Feb 2022

Neuroscience and Complex Systems Networking Event, Scottish Univ. Insight Inst., Glasgow, March 2020

Algorithms and Software for Discrete Computat. Math., CoDiMa Workshop, Univ. of Manchester, May 2019

One-Day-Meeting in Combinatorics, Sungkyunkwan University, Korea, April 2019

Theoretical and Computational Discrete Mathematics (**TCDM**), Univ. of Derby, UK, Sept 2018

5th International Conference on Riordan Arrays and Related Topics (**5RART**), Korea, June 2018

21st Int. Conference on Developments in Language Theory (**DLT**), Univ. of Liège, Belgium, August 2017

Open School on Comb. Methods in Analysis of Alg. and Data Struct., Sungkyunkwan Univ, Korea, Feb 2017

One-Day-Meeting in Combinatorics, Sungkyunkwan University, Korea, Sept 2017

Scottish Combinatorics Meeting, University of Glasgow, Apr 2015

12th International Permutation Patterns Conference (**PP**), East Tennessee State University, July 2014

AMS-MAA joint meetings in 2010 and 2013 at San Francisco and San Diego, respectively

Invited colloquium talks at Departments of Mathematics

SUSTech (2025), Nihon University, Japan (2018); Sungkyunkwan University, Korea (2017); University of California, San Diego (2013, 2012); California Polytechnic State University (2012, 2011, 2010); University of St Andrews (2013, 2011); California State University, Los Angeles (2010, 2009)

Organisation of scientific meetings and Program Committees

Chairman of the org. committee and PC member, **2021 Permutation Patterns Virtual Workshop, PP 2021**

PC member, 13th International Conf. on **Language and Automata Theory and Applications**, LATA 2019
 The *organiser* of the workshop in combinatorics at **British Mathematical Colloquium**, BMC 2018
Chairman of the organising committee, 26th **British Combinatorial Conference**, BCC 2017
 The *organiser* of the mini-symposium "Patterns in permutations and words" at BCC 2017
Chairman of the organising committee, 10th Conference on **Permutation Patterns**, PP 2012
Member of the organising committee, **Formal Power Series and Algebraic Combinatorics**, FPSAC 2011
Chairman of the organising committee, 10th **Nordic Combinatorial Conference**, NORCOM 2010
Member of the organising committee, 4th **Permutation Patterns**, PP 2006

Current journal editorial board membership

Journal of Combinatorial Theory, Series A (JCTA, since 2023), Proceedings of the Edinburgh Mathematical Society (PEMS, since 2023), Enumerative Combinatorics and Applications (ECA; since 2020)

Grants

£45,267 Leverhulme Research Fellowship, 2023-2024
£8,000 from *Scottish Mathematical Sciences Training Centre*, 2020
£10,150 from *London Mathematical Society* in total for the period 2015-2022
£4,695 from *Edinburgh Mathematical Society* in total for the period 2012-2016
£3,000 from *Glasgow Mathematical Journal Trust*, 2015
£4,203 Global Engagements in Research, *University of Strathclyde* and *EPSRC*, 2013, 2014 and 2018
£2,300 from *EPSRC Vacation Bursary Programme* to supervise a research project, 2014
£12,000 University of Strathclyde Faculty of Science Grant, 2011
39,800 EUR, highly competitive "Abel Extraordinary Chair" from *Universidad Complutense de Madrid*, Spain for 6 month research stay at *Universitat Politècnica de Catalunya*, 2010
£500,000 co-investigator, grant for Excellence from *Iceland Science Found.*, 2009
£250,000 co-investigator, grant for Excellence from *Iceland Science Found.*, 2006

Postdoctoral mentor for

Amy Glen 2008-2009 (Murdoch Univ.), Vit Jelinek 2009-2010 (Charles Univ.), Pavel Salimov 2011 (Excelsior LLC), Chris Severs 2011 (eBay), Henning Ulfarsson 2010-2011 (Reykjavik Univ.)
PhD students: Marc Glen (2019), Kittitai Iamthong (2021), Najlaa Alalwan (2021), Humaira Hameed (since 2022), Mohammed Alshammari (since 2023)

Short- and long-term research visits

2021 - 2014, 2012, 2011, 2009: **Sobolev Institute of Mathematics**, Russia (Prof. Sergey Avgustinovich)
 2019: **Center for Applied Mathematics, Tianjin University**, China (Prof. William Chen)
 2019, 2018, 2017: **Sungkyunkwan University**, Korea (Prof. Gi-Sang Cheon)
 2019, 2018: **Nihon University**, Japan (Prof. Akira Saito)
 2018, 2017, 2015, 2014: **Nankai University**, China (Prof. William Chen, Prof. Arthur Yang)
 2024, 2017: **Fudan University**, China (Prof. Hehui Wu)
 2024, 2017: **Shanghai Jiao Tong University**, China (Prof. Yakon Wu, Prof. Jun Ma)
 2016, 2015: **University of Bourgogne**, France (Prof. Vincent Vinovszki)
 2014, 2013, 2012, 2011, 2010, 2009, 2006: **University of California, San Diego**, US (Prof. Jeffrey Remmel)
 2013, 2011, 2007: **University of St Andrews**, UK (Prof. Nik Ruskuc)
 2012: **University of Warwick**, UK (Prof. Vadim Lozin)
 2010: **Universitat Politècnica de Catalunya**, Spain (Prof. Marc Noy)
 2010: **Jagiellonian University in Kraków**, Poland (Prof. Włodzimierz Moczurad)
 2005: **Mittag-Leffler Institute**, Sweden (Program in Algebraic Combinatorics)

Research and administrative related activities and commissions of trust

Associate Dean (Research), Faculty of Science (since 2021)
Head of Strathclyde Combinatorics Group (since 2021)
Director of Internationalisation, Computer and Inf. Sciences Dept, Uni of Strathclyde (2018-19)
Director of Research, Computer and Information Sciences Dept, Uni of Strathclyde (2014-17)
Director of Departmental Graduate Program, Comp. and Inf. Sciences, Univ. of Strathclyde (2013-14)
Member of **Faculty Management Team** (since 2021), **British Combinatorial Committee** (2015-17)
Steering Committee for the conference "Permutation Patterns" (since 2014), **Edinburgh Mathematical Society** (since 2012), **London Mathematical Society** (since 2020), **Knowledge Exchange Committee**, Uni of Strath. (2015-16), **Departmental Industrial Advisory Board**, Uni of Strath. (2013-15), **Departmental Management Team**, Uni of Strath. (2012-2016), **Icelandic Center of Excellence in Theoretical Computer Science**, ICE-TCS (2005-11), **Examiner for PhD defences (vivas)**: Zamaraeva (Warwick, 2020), McDevitt (St Andrews, 2019), Collins (Warwick, 2017), Smith (Strathclyde, 2015), Hoffmann (St Andrews, 2015), Hannah (Strathclyde, 2015), Purcell (Warwick, 2013), Bell (Lancaster, 2011); **External Examiner** for the *MSc Applicable Mathematics programme*, **London School of Economics and Political Science** (2016-2019)