

# Curriculum Vitae Sergey Kitaev

personal.strath.ac.uk/sergey.kitaev/

## 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

2011-now: **Reader**; since 2021 **Associate Dean (Research)**, Faculty of Science, 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 **158 publications** including **114 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 (102 reviews)** and I have done referee work for **54 journals**. I have given **184 talks** for various audiences; see

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I am cited **2323** times on Google Scholar (as of **August 2022**); **h-index** is **25**. 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 (**SRART**), 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

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

#### **Journal editorial board membership**

Enumerative Combinatorics and Applications (ECA; since 2020), Mathematics (2019-2022), J. of Discrete Math. (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)

#### **Grants**

**£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), Kittitit Iamthong (2021), Najlaa Alalwan (2021)

#### **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)  
2017: **Fudan University**, China (Prof. Hehui Wu)  
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 the 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), **Financial Director** of the Mathematics Institute at Reykjavik Uni (2009-11)  
**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)