

Alexander Mieczyslaw Kasprzyk

PERSONAL INFORMATION	School of Mathematical Sciences University of Nottingham University Park Nottingham NG7 2RD United Kingdom	Phone: +44 (0)115 951 3839 E-mail: a.m.kasprzyk@nottingham.ac.uk Web: https://kasprzyk.work ORCID: 0000-0003-2340-5257
EMPLOYMENT	Associate Professor (Reader) in Geometry University of Nottingham, UK	Aug 2015–present
	Secondment to the Heilbronn Institute Heilbronn Institute for Mathematical Research, UK	Sep 2017–Aug 2019
	Research Fellow Imperial College London, UK	Dec 2014–Jul 2015
	Postdoctoral Research Associate Imperial College London, UK	Jan 2011–Nov 2014
	Research Fellow University of Sydney, Australia	Nov 2009–Dec 2010
	Postdoctoral Research Associate University of Kent, UK	Oct 2008–Oct 2009
	Postdoctoral Research Fellow University of New Brunswick, Canada	Sep 2006–Sep 2008
CONSULTANCY	Centre for Emerging Technology and Security, UK	Jun 2023–Jan 2024
	Heilbronn Institute for Mathematical Research, UK	Sep 2019–present
EDUCATION	University of Bath, UK Ph.D. in Mathematics	2002–2006
	University of Oxford, UK MMath in Mathematics	1998–2002
REFEREED PUBLICATIONS	Where relevant, the number of citations is included in [red] (data collected from Google Scholar). As of Dec 2023 my work (including preprints omitted here) has been cited over 1500 times.	
	(39) The Rapid Rise of Generative AI: Assessing risks to safety and security. A. Janjeva, A. Harris, S. Mercer, A. Kasprzyk, A. Gausen, <i>Centre for Emerging Technology and Security Research Report</i> (2023).	
	(38) Machine learning detects terminal singularities. [1] T. Coates, A. Kasprzyk, S. Venziale, <i>Neural Information Processing Systems (NeurIPS)</i> (2023).	
	(37) Machine learning the dimension of a Fano variety. [2] T. Coates, A. Kasprzyk, S. Venziale, <i>Nature Communications</i> 14 :5526 (2023).	
	(36) Computation and data in the classification of Fano varieties. G. Brown, T. Coates, A. Corti, T. Ducat, L. Heuberger, A. Kasprzyk, <i>Nankai Symposium on Mathematical Dialogues</i> , Springer, 2023.	
	(35) Toric Sarkisov links of toric Fano varieties. G. Brown, J. Buczyński, A. Kasprzyk, <i>Birational Geometry, Kähler–Einstein Metrics and Degenerations</i> , Springer, 2023, 129–144.	
	(34) Machine learning the dimension of a polytope. [2] T. Coates, J. Hofscheier, A. Kasprzyk, <i>Machine Learning in Pure Mathematics and Theoretical Physics</i> , World Scientific, 2023, 85–104.	

- (33) Singularity content. [39]
M. Akhtar, A. Kasprzyk, To appear in *Kyoto J. Math.* (2023).
- (32) Databases of quantum periods for Fano manifolds. [3]
T. Coates, A. Kasprzyk, *Nature Sci. Data* **9**:163 (2022).
- (31) On the maximum dual volume of a canonical Fano polytope. [10]
G. Ballelli, A. Kasprzyk, B. Nill, *Forum of Math., Sigma* **10** (2022), e109.
- (30) On the Fine interior of three-dimensional canonical Fano polytopes. [10]
V. Batyrev, A. Kasprzyk, K. Schaller, *Interactions with Lattice Polytopes*, Springer, 2022, 11–47.
- (29) Gorenstein formats, canonical and Calabi–Yau threefolds. [22]
G. Brown, A. Kasprzyk, L. Zhu, *Exp. Math.* **31**(1) (2022), 146–164.
- (28) Laurent polynomials in mirror symmetry: why and how?
A. Kasprzyk, V. Przyjalkowski, *Proyecciones J. Math.* **41**(2) (2022), 481–515.
- (27) Hilbert series, machine learning, and applications to physics. [18]
J. Bao, Y.-H. He, E. Hirst, J. Hofschneider, A. Kasprzyk, S. Majumder, *Phys. Lett. B* **827**:136966 (2022).
- (26) Maximally mutable Laurent polynomials. [27]
T. Coates, A. Kasprzyk, G. Pitton, K. Tveiten, *Proceedings of the Royal Society A* **477**:20210584 (2021).
- (25) Quantum periods for certain four-dimensional Fano manifolds. [16]
T. Coates, S. Galkin, A. Kasprzyk, A. Strangeway, *Exp. Math.* **29**(2) (2020), 183–221.
- (24) Laurent inversion. [31]
T. Coates, A. Kasprzyk, T. Prince, *Pure Appl. Math. Q.* **15**(4) (2019), 1135–1179.
- (23) Appendix to Four dimensional Fano quiver flag zero loci. [18]
T. Coates, E. Kalashnikov, A. Kasprzyk, *Proceedings of the Royal Society A* **475**:20180791 (2019).
- (22) Ehrhart polynomial roots of reflexive polytopes. [14]
G. Hegedüs, A. Higashitani, A. Kasprzyk, *Electron. J. Combin.* **26**(1) (2019), P1.38.
- (21) Fano 3-folds in $\mathbb{P}^2 \times \mathbb{P}^2$ format, Tom and Jerry. [16]
G. Brown, A. Kasprzyk, M. Qureshi, *Eur. J. Math.* **4**(1) (2018), 57–72.
- (20) Minimality and mutation-equivalence of polygons. [38]
A. Kasprzyk, B. Nill, T. Prince, *Forum of Math., Sigma* **5** (2017), e18.
- (19) Mutations of fake weighted projective planes. [24]
M. Akhtar, A. Kasprzyk, *Proc. Edinburgh Math. Soc. (2)* **59**(2) (2016), 271–285.
- (18) Quantum periods for 3-dimensional Fano manifolds. [119]
T. Coates, A. Corti, S. Galkin, A. Kasprzyk, *Geom. Topol.* **20**(1) (2016), 103–256.
- (17) Mirror symmetry and the classification of orbifold del Pezzo surfaces. [78]
M. Akhtar, T. Coates, A. Corti, L. Heuberger, A. Kasprzyk, A. Oneto, A. Petracci, T. Prince, K. Tveiten, *Proc. Amer. Math. Soc.* **144** (2016), 513–527.
- (16) Four-dimensional projective orbifold hypersurfaces. [28]
G. Brown, A. Kasprzyk, *Exp. Math.* **25**(2) (2016), 176–193.
- (15) Four-dimensional Fano toric complete intersections. [38]
T. Coates, A. Kasprzyk, T. Prince, *Proceedings of the Royal Society A* **471**:20140704 (2015).
- (14) Mutations of fake weighted projective spaces. [1]
T. Coates, S. Gonshaw, A. Kasprzyk, N. Nabijou, *Electron. J. Combin.* **21**(4) (2014), P4.14.
- (13) Mirror symmetry and Fano manifolds. [135]
T. Coates, A. Corti, S. Galkin, V. Golyshev, A. Kasprzyk, *Proceedings of the 6th European Congress of Mathematics*, European Mathematical Society, 2013, 285–300.

- (12) Seven new champion linear codes. [19]
G. Brown, A. Kasprzyk, *LMS J. Comput. Math.* **16** (2013), 109–117.
 - (11) Small polygons and toric codes. [19]
G. Brown, A. Kasprzyk, *J. Symbolic Comput.* **51** (2013), 55–62.
 - (10) Fano polytopes. [41]
A. Kasprzyk, B. Nill, *Strings, Gauge Fields, and the Geometry Behind – The Legacy of Maximilian Kreuzer*, World Scientific, 2012, 349–364.
 - (9) Minkowski polynomials and mutations. [114]
M. Akhtar, T. Coates, S. Galkin, A. Kasprzyk, *SIGMA Symmetry Integrability Geom. Methods Appl.* **8** (2012), 094, pp. 707.
 - (8) Reflexive polytopes of higher index and the number 12. [20]
A. Kasprzyk, B. Nill, *Electron. J. Combin.* **19**(3) (2012), P9.
 - (7) The boundary volume of a lattice polytope. [10]
G. Hegedüs, A. Kasprzyk, *Bull. Aust. Math. Soc.* **85** (2012), 84–104.
 - (6) Roots of Ehrhart polynomials of smooth Fano polytopes. [10]
G. Hegedüs, A. Kasprzyk, *Discrete Comput. Geom.* **46**(3) (2011), 488–499.
 - (5) Canonical toric Fano threefolds. [100]
A. Kasprzyk, *Canad. J. Math.* **62**(6) (2010), 1293–1309.
 - (4) On the combinatorial classification of toric log del Pezzo surfaces. [42]
A. Kasprzyk, M. Kreuzer, B. Nill, *LMS J. Comput. Math.* **13** (2010), 33–46.
 - (3) Bounds on fake weighted projective space. [62]
A. Kasprzyk, *Kodai Math. J.* **32** (2009), 197–208.
 - (2) A note on palindromic δ -vectors for certain rational polytopes. [36]
M. Fiset, A. Kasprzyk, *Electron. J. Combin.* **15**(1) (2008), N18.
 - (1) Toric Fano three-folds with terminal singularities. [77]
A. Kasprzyk, *Tohoku Math. J.* **58**(1) (2006), 101–121.
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| SCIENTIFIC SOFTWARE & DATABASES | <ol style="list-style-type: none"> (7) The Fano 3-fold database. [6]
G. Brown, A. Kasprzyk, <i>Zenodo</i> (2022). doi:10.5281/zenodo.5820338 (6) Quantum periods for four-dimensional Fano manifolds. doi:10.5281/zenodo.5708307
T. Coates, A. Kasprzyk, <i>Zenodo</i> (2021). (5) PCAS: A Parallel Computational Algebra System. https://www.pcas.xyz
T. Coates, A. Kasprzyk, 2017–present. (4) The classification of toric canonical Fano 3-folds. [3] doi:10.5281/zenodo.5866330
A. Kasprzyk, (2010). (3) Convex polytopes and polyhedra. [3] https://tinyurl.com/2p9cmuk9
G. Brown, A. Kasprzyk, (2009). (2) Toric geometry. https://tinyurl.com/bdww76mc
G. Brown, J. Buczyński, A. Kasprzyk, (2009). (1) Graded Ring Database. [138] http://www.grdb.co.uk
G. Brown, A. Kasprzyk, 2007–present. |
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| EDITED VOLUMES | <ol style="list-style-type: none"> (3) <i>Angles of Geometry: Proceedings of the Nottingham Geometry Seminar.</i>
L. Campo, J. Hofscheier, and A. Kasprzyk (eds), World Scientific, 2024. (2) <i>Recent developments in Algebraic Geometry.</i>
H. Abban, G. Brown, A. Kasprzyk, and S. Mori (eds), London Mathematical Society Lecture Note Series, 478, Cambridge University Press, 2022. (1) <i>Interactions with lattice polytopes.</i>
A. Kasprzyk and B. Nill (eds), Springer Proceedings in Mathematics & Statistics, 386, Springer, 2022. |
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| JOURNAL EDITOR-IN-CHIEF | <i>Experimental Mathematics</i> 2023–present
Publishes formal results in pure mathematics inspired by experimentation, conjectures suggested by experiments, and data supporting significant hypotheses. |
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JOURNAL	<i>Fundamental Journal of Mathematics and Applications</i>	2023–present
EDITORIAL BOARD MEMBER	Publishes original research articles, review articles, and survey articles with a focus on number theory, geometry, and topology.	
	<i>International Journal of Data Science in the Mathematical Sciences</i>	2022–present
	A highly interdisciplinary journal aimed at experimental mathematicians, both pure and applied, physicists, and data scientists, with a focus on machine learning.	
	<i>Enumerative Combinatorics and Applications</i>	2021–present
	Covers research in enumerative combinatorics, focussing on research resulting from the rich interplay between mathematics and theoretical physics.	
	<i>Experimental Results</i>	2021–2023
	An open access, open peer review journal providing a venue to publish all valid experimental findings, from all disciplines across STEM.	

GOVERNMENT POLICY ADVICE	<i>Generative AI and National Security</i>	Dec 2023
	Centre for Emerging Technology and Security	
	<i>Global AI Safety Summit pre-Summit Royal Society Workshop</i>	Oct 2023
	Science x AI Safety: Horizon-scanning AI safety risks across scientific disciplines	
	<i>Global AI Safety Summit AI for Innovation</i>	Oct 2023
	Department for Science, Innovation and Technology	

SELECTED GRANTS Since 2016 I have been awarded over £1M in external funding. With the exception of the grant indicated by * below, all are externally funded.

Project title	Role	Funder	Dates	Value
<i>Computational Algebraic Geometry</i> INI Network Grant	Co-I	INI	Apr 2023– Mar 2025	£15K
<i>DANGER: Data, Numbers & Geometry</i> INI Network Grant	PI	INI	Jan 2023– Dec 2024	£30K
<i>PhD Sponsorship</i> Four-year PhD studentship	PI	GCHQ	Oct 2020– Aug 2024	£45K
<i>Constructing a Periodic Table for Geometry</i> Tübingen–Nottingham seedcorn*	PI	Tübingen & Nottingham	Sep 2021– Sep 2023	€24K
<i>Turing Network Development Award</i> ATI Network Funding	Co-I	ATI	Feb– Sep 2022	£40K
<i>The Combinatorics of Mirror Symmetry</i> EPSRC Fellowship EP/N022513/1	PI	EPSRC	Jun 2016– Mar 2022	£551K
<i>Algorithmic Methods in Algebraic Geometry</i> Nottingham–MAGMA collaboration	PI	University of Sydney	Apr 2018– Mar 2021	£240K
<i>Secondment</i> Secondment to HIMR	PI	GCHQ	Oct 2017– Sep 2019	£53K
<i>Computing toric Fano varieties</i> Atlantic Excellence Network Fellowship	PI	ACEnet	Oct 2007– Sep 2009	\$80K

POSTDOC SUPERVISION	Name	Dates
	Johannes Hofscheier	2020–2022
	Progressed to Assistant Professor in Geometry at the University of Nottingham.	
	Livia Campo	2020–2021
	Progressed to a postdoc at the University of Birmingham with M. Mazzocco.	
	Currently Research Fellow at the Korea Institute for Advanced Study (KIAS), Korea.	
	Giuseppe Pitton	2018–2021
	Progressed to a data science position at Deutsche Bank.	
	Michael Harrison	2018–2021
	Progressed to a software engineering position in industry.	

Andrea Petracci 2017–2019
 Progressed to a postdoc at Freie Universität Berlin with K. Altmann.
 Currently Assistant Professor at the Università di Bologna, Italy.

PHD SUPERVISION	Name	Role	Dates
	Charles Yallup <i>Toric degenerations, mutations, and the associated cluster varieties</i>	Supervisor	2023–present
	Heath Pearson <i>Mirror symmetry for spherical Fano varieties</i>	Supervisor	2023–present
	Sara Veneziale <i>Machine learning Fano varieties from the quantum period</i> Progressed to a Chapman–Schmidt Fellowship in AI for Science, Imperial College.	Supervisor	2021–2023
	Girtrude Hamm <i>Mirror symmetry for terminal Fano threefolds</i> Part-funded by a HIMR studentship (£45K).	Supervisor	2020–present
	Thomas Hall <i>Four dimensional Fano varieties in the mirror</i> Part-funded by a JSPS pre-doctoral research bursary (£42K).	Supervisor	2019–present
	Christopher Hall <i>Investigations into local class field theory over general fields</i> Progressed to an LMS Postdoctoral Fellowship.	Second Supervisor	2019–2023
	Daniel Cavey <i>Mirror symmetry for orbifold del Pezzo surfaces</i> Progressed to a postdoc at the University of Lancaster with J. Evans.	Supervisor	2016–2019
	Paolo Dolce <i>Low dimensional Adelic geometry</i> Progressed to a postdoc at the University of Udine, Italy.	Second Supervisor	2015–2018
	Mohammad Akhtar <i>Mutations of Laurent polynomials and lattice polytopes</i> Progressed to a Hodge Fellowship at the IHÉS, France, with M. Kontsevich.	Supervisor	2011–2015
INVITED SUMMER SCHOOLS & LECTURE SERIES	University of Oxford, UK <i>LMS Research School: Machine Learning in Mathematics and Theoretical Physics</i>		3–7 Jul 2023
	Fraunhofer Institute for Industrial Mathematics, Germany <i>Computational Geometry</i>		28 Nov–1 Dec 2022
	Kyoto University, Japan <i>Mirror Symmetry for Fano Manifolds and Related Topics</i>		10–14 Dec 2018
	International Centre for Theoretical Physics (ICTP), Trieste, Italy <i>Advanced school on Moduli Spaces, Mirror Symmetry, and Enumerative Geometry</i>		1–12 Aug 2016
	University of Catania, Italy <i>Pragmatic 2013: Summer School on Mirror Symmetry and Fano Manifolds</i>		16 Sep–4 Oct 2013
ORGANISATION OF SEMINARS & CONFERENCES SINCE 2017	<i>ICMS 2024: Machine Learning within Computer Algebra Systems</i> Durham University, UK		22–25 Jul 2024
	<i>Computational Geometry</i> Banff international Research Station (BIRS), Canada		23–28 Jun 2024
	<i>DANGER 3: Data, Numbers, & Geometry</i> London Institute for Mathematical Sciences, UK		24–25 Aug 2023
	<i>Computational Algebraic Geometry Workshop</i> University of Warwick, UK		27–31 Mar 2023
	<i>Online Machine Learning Seminar</i> Online		Feb 2023–present
	<i>Computational Geometry</i> University of Nottingham, UK		29 Aug–2 Sep 2022
	<i>DANGER 2: Data, Numbers, & Geometry</i>		25–26 Aug 2022

	<i>DANGER: Data, Numbers, & Geometry</i> Online	25–26 Aug 2021
	<i>Fano varieties and Birational Geometry</i> Online	23–26 Feb 2021
	<i>Sanya Workshop on Machine Learning in Geometry and Physics</i> Tsinghua Sanya International Mathematics Forum, Shanghai	26–28 Jan 2021
	<i>COW/EmSG/GLEN Joint Summer School</i> Online	7–11 Sep 2020
	<i>ICMS 2020: Databases in Mathematics</i> Braunschweig, Germany	13–16 Jul 2020
	<i>Machine Learning in Algebraic Geometry</i> University of Nottingham, UK	Jun 2020
	<i>Online Algebraic Geometry Seminar</i> Online	Apr 2020–present
	<i>Lucia Geometrica: A Celebration of Geometry</i> Stockholm University, Sweden	9–13 Dec 2019
	<i>Lattice polytopes, with a view towards Geometry and Applications</i> ICMS, Edinburgh, UK	18–20 Sep 2019
	<i>Mutations: Mirror Symmetry, Deformations, and Combinatorics</i> Banff international Research Station (BIRS), Canada	11–16 Aug 2019
	<i>Cluster algebras and algebraic geometry</i> University of Nottingham, UK	11–14 Jul 2018
	<i>Interactions with Lattice Polytopes</i> Otto-von-Guericke-Universität Magdeburg, Germany	14–16 Sep 2017
	<i>Experimental Classification of Fano Varieties</i> Universität Tübingen, Germany	16–18 Aug 2017
	<i>Workshop on Computational Algebra</i> King’s College, University of Cambridge, UK	18–21 Apr 2017
SELECTED INVITED TALKS SINCE 2010	Universität Tübingen, Germany	Oct 2024
	Workshop to celebrate Hausen’s 60th birthday	
	Będlewo, Poland	Jul 2024
	Fano and uniruled varieties	
	TU Berlin, Germany	Jan 2024
	Discrete and Convex Geometry Seminar	
	New Orleans, USA	Dec 2023
	Conference on Neural Information Processing Systems (NeurIPS)	
	Schloss Dagstuhl, Germany	Oct 2023
	Automated mathematics: integrating proofs, algorithms and data	
	International Centre for Theoretical Physics (ICTP), Trieste, Italy	Sep 2023
	Workshop on Deformation Theory II	
	Technische Universität Berlin, Germany	Nov 2022
	MOM workshop on MaRDI, OSCAR and MATHREPO	
	San Diego, USA	Sep 2022
	SIAM Conference on Mathematics of Data Science	
	Boston University, USA	May 2022
	Big Data in Pure Mathematics	
	University of Connecticut, USA	Mar 2022
	Department Colloquium	
	Texas, USA	Aug 2021
	SIAM Conference on Algebraic Geometry	
	Chern Institute of Mathematics, China	Aug 2021
	Nankai Symposium on Mathematical Dialogues	

Steklov Mathematical Institute, Russia Iskovskikh Seminar Series	May 2020
University of Torino, Italy Algebraic Geometry – Torino 2020	Feb 2020
Chicheley Hall, UK 3CinG Workshop	Sep 2019
University of Warwick, UK Classification, Computation, and Construction, New Methods in Geometry	Oct 2018
London Mathematical Society, UK Mirror Symmetry and Fano Manifolds	Oct 2017
Banach Center, Warsaw, Poland Periods and Ricci flat manifolds	Sep 2017
Museum of Science and Industry, Manchester, UK Second Conference of Research Software Engineers	Sep 2017
Universität Tübingen, Germany Experimental Classification of Fano Varieties	Aug 2017
Johannes Gutenberg-Universität Mainz, Germany Cluster Algebras in Mathematical Physics	Mar 2017
Freie Universität Berlin, Germany Einstein workshop on Lattice Polytopes	Dec 2016
Banff International Research Station, Canada Homological Mirror Geometry	Mar 2016
Hannover University, Germany Experimental Methods in Computational Algebra	May 2015
University of Ulm, Germany Department Colloquium	Feb 2015
Simons Center for Geometry and Physics, Stony Brook University, USA Wall Crossing, Quantum Integrable Systems, and TQFT	Nov 2014
Max Planck Institute for Mathematics, Bonn, Germany Motivic Structures on Quantum Cohomology & Pencils of CY Motives	Sep 2014
KTH Royal Institute of Technology, Stockholm, Sweden Algebra & Geometry Seminar	Aug 2014
Freie Universität Berlin, Germany Combinatorics and Geometry Seminar	Jul 2014
University of Vienna, Austria Geometry and Mathematical Physics Seminar	Jun 2014
Miami University, USA Homological Mirror Symmetry	Jan 2014
Colorado State University, USA SIAM Conference on Applied Algebraic Geometry	Aug 2013
TU Berlin, Germany 21st International Symposium on Mathematical Programming	Aug 2012
Kyoto University, Japan Convex Polytopes	Jul 2012
British Mathematical Colloquium, UK British Mathematical Colloquium: Number Theory and Algebraic Geometry	Apr 2012
University of Sydney, Australia Department Colloquium	Jan 2012
Freie Universität Berlin, Germany Extremal Laurent Polynomials and Fano Varieties	Dec 2011
RICAM, Austrian Academy of Sciences, Linz, Austria Colloquium	Apr 2011
University of Sydney, Australia Computational Algebra Seminar	Oct 2010
Freie Universität Berlin, Germany Combinatorics and Geometry Seminar	Jun 2010

EXTERNAL LEADERSHIP RESPONSIBILITIES	<i>EPSRC Strategic Advisory Team (SAT)</i>	Jan 2022–present
	One of 16 elected members of the EPSRC’s Mathematical Sciences SAT, developing future EPSRC strategy and shaping the research and training portfolios.	
	<i>Convenor for the LMS Continuing Professional Development Panel Sessions for Early Career Researchers</i>	Aug 2023–present
	<i>ATI Topology and Geometry of Data Interest Group Member</i>	Jan 2023–present
	Member of the Alan Turing Institute group focusing on applications of topology and geometry to the analysis of noisy data.	
	<i>External Examiner, University of East Anglia</i>	Oct 2022–present
	<i>External Examiner, University of Bath</i>	Oct 2021–present
	<i>EPSRC Prosperity Partnerships Interview Panel</i>	Jul 2023
	<i>EPSRC Programme Grant Outline Panel</i>	Jun 2023
	<i>EPSRC Fellowship Interview Panel</i>	Jul 2022
	<i>EPSRC New Horizons Outline Panel</i>	Mar 2022
	<i>EPSRC Mathematics Prioritisation Panel</i>	Sep 2016, Nov 2020
	<i>Mentor for the Society of Research Software Engineering</i>	Oct 2021–present
	<i>German Research Foundation (DFG) Review Panel</i>	Mar 2021
	<i>Athena SWAN Assessment Panel</i>	Jan 2021
UNIVERSITY LEADERSHIP RESPONSIBILITIES	<i>Head of Pure Mathematics</i>	Aug 2020–present
	I lead a section of approximately 20 academic staff and PDRAs. Responsibilities include: curriculum review; allocation of teaching duties; research growth and grant applications; REF submission; PhD recruitment; staff hiring, promotions, evaluation, and performance management.	
	<i>School Leadership Board</i>	Aug 2020–present
	<i>Research Board</i>	Aug 2020–present
	<i>Equality, Diversity, and Inclusion (EDI) Committee</i>	Aug 2018–present
OUTREACH & PUBLIC ENGAGEMENT	<i>New Scientist</i>	Oct 2023
	AI is helping mathematicians build a periodic table of shapes: “Mathematicians attempting to build a ‘periodic table’ of shapes have turned to artificial intelligence for help...”	
	<i>Popular Mechanics</i>	Oct 2023
	Mathematicians are close to building the perfect periodic table of shapes: “Just as molecules can be broken down into atoms, so too can mathematical shapes be broken down into more basic components...”	
	<i>Pint of Science</i>	May 2022
	Helped organise Nottingham’s contribution to the global Pint of Science festival.	
	<i>A periodic table of shapes</i>	2012–2015
	Collaborated with artist-in-residence Gemma Anderson-Tempini interpreting the mathematics of Fano varieties through print-making and sculpture.	
	<i>Physics World</i>	Mar 2011
	Nature’s building blocks brought to life: “The scientists are looking for shapes, known as ‘Fano varieties’, which are basic building blocks and cannot be broken down into simpler shapes...”	
	<i>New Scientist</i>	Feb 2011
	Atoms ripple in the periodic table of shapes: “This rippling structure may look like a piece of origami, or an intricate scarf. In fact, it is geometry’s answer to the atom...”	
	<i>Science</i>	Feb 2011
	Elementary mathematics: “An international group of mathematicians hopes to do for math what Dmitri Mendeleev’s periodic table did for chemistry...”	

