CV: Matthew J. Colbrook

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EDUCATION

- October 2016 – September 2020: University of Cambridge, St John's College, UK
  PhD, Mathematics, Cambridge Centre for Analysis (CDT, Supervisor: Prof. A. Hansen)
  Thesis: *The Foundations of Infinite-Dimensional Spectral Computations*
  – winner of the *SIAM Richard C. DiPrima Prize 2022*.
- Academic year 2015 – 2016: University of Cambridge, St John's College, UK
  MMath, Mathematics. Grade: Distinction.
  Ranked 3rd in year (out of > 200) and top in Department of Applied Mathematics and Theoretical Physics.
- October 2012 – July 2015: University of Cambridge, St John's College, UK
  BA (Hons), Mathematics. Grade: 1st every year.

ACADEMIC POSITIONS

- Oct. 2022 – present: Assistant Professor, University of Cambridge, UK.
- Oct. 2021 – Sep. 2022: Fondation Sciences Mathématiques de Paris Fellow, École Normale Supérieure (Paris).
- Oct. 2020 – Sep. 2022: Junior Research Fellow, Trinity College, University of Cambridge, UK.

MAIN ACADEMIC PRIZES/AWARDS

- *Popov Prize 2023*: International prize awarded every three years to an early career mathematician (within six years of PhD) that "recognises outstanding research in the field of approximation theory and related areas of mathematics."
- *IMA Leslie Fox (2nd) Prize 2023*: IMA international prize awarded every two years to young researchers for "mathematical and algorithmic brilliance" in numerical analysis, based on a paper and lecture.
- *SIAM Activity Group on Computational Science and Engineering Best Paper Prize 2023*: SIAM international prize awarded every two years to the best paper on "the development and use of mathematical and computational tools and methods for solving problems that may arise in broad areas of science, engineering, technology, and society."
- *SIAM Richard C. DiPrima Prize 2022*: SIAM international prize awarded every two years to one "early career researcher who has done outstanding research in applied mathematics", based on doctoral dissertation.
- *IMA Lighthill–Thwaites Prize 2021*: IMA international prize awarded every two years to an early career researcher for "outstanding contributions in applied mathematics", based on a paper and lecture.
- *Cecil King Travel Scholarship Award 2020*: Annual early career prize of the London Mathematical Society.
- *A Grade 1 Smith–Knight/Rayleigh–Knight Prize 2018*:Annual prize for the best piece of research by a graduate student in mathematics at the University of Cambridge.
- *Mayhew Prize 2016*: Annual prize for the best masters student in applied mathematics and theoretical physics, University of Cambridge.
- *Caltech SURF Scholarship 2015*

PUBLICATIONS

Upcoming book

1. M.J. Colbrook, *Infinite-Dimensional Spectral Computations*, **Cambridge University Press**.

Journal publications (reverse chronological, excluding submitted articles)

39. M.J. Colbrook, A. Horning, T. Xie, *Computing Generalized Eigenfunctions in Rigged Hilbert Spaces*, **Pure and Applied Analysis**, to appear.
38. N. Boullé, M.J, Colbrook, *Multiplicative Dynamic Mode Decomposition*, **SIAM Journal on Applied Dynamical Systems**, to appear.
37. A. Hales, M. Colbrook, C. Jiang, *Improving Dynamic Mode Decomposition of Tandem Cylinder Flow with Nonlinear Dictionaries*, **Physics of Fluids**, to appear.
    Selected as *Featured article*.
36. M. Colbrook, C. Drysdale, A. Horning, *Rigged Dynamic Mode Decomposition: Data-Driven Generalized Eigenfunction Decompositions for Koopman Operators*, **SIAM Journal on Applied Dynamical Systems**, 2025.
35. M.J. Colbrook, A. Townsend, *Avoiding discretization issues for nonlinear eigenvalue problems*, **SIAM Journal on Matrix Analysis and Applications**, 2025.
34. B. Adcock, M.J. Colbrook, M. Neyra-Nesterenko, *Restarts subject to approximate sharpness: A parameter-free and optimal scheme for first-order methods*, **Foundations of Computational Mathematics**, 2025.

33. N. Boullé, M.J, Colbrook, *On the Convergence of Hermitian Dynamic Mode Decomposition*, **Physica D: Nonlinear Phenomena**, 2025.

32. M.J. Colbrook, *Another look at Residual Dynamic Mode Decomposition in the regime of fewer Snapshots than Dictionary Size*, **Physica D: Nonlinear Phenomena**, 2024.

31. M.J. Colbrook, *The Multiverse of Dynamic Mode Decomposition Algorithms*, **Handbook of Numerical Analysis**, 2024.

30. M.J. Colbrook, A. Townsend, *Rigorous data-driven computation of spectral properties of Koopman operators for dynamical systems*, **Communications on Pure and Applied Mathematics**, 2024.
    Certificate for top cited article in CPAM.

29. M.J. Colbrook, Q. Li, R.V. Raut, A. Townsend, *Beyond expectations: Residual Dynamic Mode Decomposition and Variance for Stochastic Dynamical Systems*, **Nonlinear Dynamics**, 2024.

28. M.J. Colbrook, *The mpEDMD Algorithm for Data-Driven Computations of Measure-Preserving Dynamical Systems*, **SIAM Journal on Numerical Analysis**, 2023.

27. M.J. Colbrook, A.C. Hansen, *The foundations of spectral computations via the solvability complexity index hierarchy*, **Journal of the European Mathematical Society**, 2023.

26. M.J. Colbrook, L. Ayton, M. Szőke, *Residual Dynamic Mode Decomposition: Robust and verified Koopmanism*, **Journal of Fluid Mechanics**, 2023.

25. M.J. Colbrook, A. Horning, K. Thicke, A. Watson, *Computing spectral properties of topological insulators without artificial truncation or supercell approximation*, **IMA Journal of Applied Mathematics**, 2023.

24. M.J. Colbrook, V. Antun, A.C. Hansen, *The difficulty of computing stable and accurate neural networks: On the barriers of deep learning and Smale's 18th problem*, **Proceedings of the National Academy of Sciences**, 2022.

23. M.J. Colbrook, *On the computation of geometric features of spectra of linear operators on Hilbert spaces*, **Foundations of Computational Mathematics**, 2022.

22. M.J. Colbrook, *WARPd: A linearly convergent first-order method for inverse problems with approximate sharpness conditions*, **SIAM Journal on Imaging Sciences**, 2022.

21. D. Johnstone, M.J. Colbrook, A. Nielsen, P. Öhberg, C. Duncan, *Bulk Localised Transport States in Infinite and Finite Quasicrystals via Magnetic Aperiodicity*, **Physical Review B**, 2022.
    Editors' highlight for issue.

20. M.J. Colbrook, *Computing semigroups with error control*, **SIAM Journal on Numerical Analysis**, 2022.
    Prize: *IMA Leslie Fox (2nd) Prize 2023*

19. M.J. Colbrook, L.J. Ayton, *A contour method for time-fractional PDEs and an application to fractional viscoelastic beam equations*, **Journal of Computational Physics**, 2022.

18. T. Loss, M.J. Colbrook, A.C. Hansen, *Stratified sampling based compressed sensing for structured signals*, **IEEE Transactions on Signal Processing**, 2022.

17. M.J. Colbrook, A. Horning, A. Townsend, *Computing spectral measures of self-adjoint operators*, **SIAM Review**, 2021.
    Cover highlight for issue.
    Prize: *SIAM Activity Group on Computational Science and Engineering Best Paper Prize 2023*.

16. M.J. Colbrook, *Computing spectral measures and spectral types*, **Communications in Mathematical Physics**, 2021.

15. M.J. Colbrook, L.J. Ayton, *Do we need non-linear corrections? On the boundary Forchheimer equation in acoustic scattering*, **Journal of Sound and Vibration**, 2021.

14. L.J. Ayton, M.J. Colbrook, T. Geyer, P. Chaitanya, E. Sarradj, *Reducing aerofoil-turbulence interaction noise through chordwise-varying porosity*, **Journal of Fluid Mechanics**, 2021.

13. M.J. Colbrook, A. Kisil, *A Mathieu function boundary spectral method for diffraction by multiple variable poro-elastic plates, with applications to metamaterials and acoustics*, **Proceedings of the Royal Society A**, 2020.
    Cover highlight for issue.

12. M.J. Colbrook, Z.I. Botev, K. Kuritz, S. MacNamara, *Kernel density estimation with linked boundary conditions*, **Studies in Applied Mathematics**, 2020.

11. M.J. Colbrook, *Extending the unified transform: Curvilinear polygons and variable coefficient PDEs*, **IMA Journal of Numerical Analysis**, 2020.

10. M.J. Colbrook, *Pseudoergodic operators and periodic boundary conditions*, **Mathematics of Computation**, 2020.

9. M.J. Colbrook, M.J. Priddin, *Fast and spectrally accurate numerical methods for perforated screens*, **IMA Journal of Applied Mathematics**, 2020.

8. M.J. Colbrook, B. Roman, A.C. Hansen, *How to compute spectra with error control*, **Physical Review Letters**, 2019.
   Cover highlight for issue.
   Prizes: *Grade 1 Smith–Knight/Rayleigh–Knight Prize 2018* and *IMA Lighthill–Thwaites Prize 2021*.

7. M.J. Colbrook, A.C. Hansen, *On the infinite-dimensional QR algorithm*, **Numerische Mathematik**, 2019.

6. M.J. Colbrook, L.J. Ayton, A.S. Fokas, *The unified transform for mixed boundary condition problems in unbounded domains*, **Proceedings of the Royal Society A**, 2019.
   Prize: [*IMA Lighthill–Thwaites Finalist 2021*](#).

5. M.J. Colbrook, A.S. Fokas, P. Hashemzadeh, *A hybrid analytical-numerical technique for elliptic PDEs*, **SIAM Journal on Scientific Computing**, 2019.

4. M.J. Colbrook, L.J. Ayton, *A spectral collocation method for acoustic scattering by multiple elastic plates*, **Journal of Sound and Vibration**, 2019.

3. F. de Barros, M.J. Colbrook, A.S. Fokas, *A hybrid analytical-numerical method for solving advection-dispersion problems on a half-line*, **International Journal of Heat and Mass Transfer**, 2019.

2. M.J. Colbrook, N. Flyer, B. Fornberg, *On the Fokas method for the solution of elliptic problems in both convex and non-convex polygonal domains*, **Journal of Computational Physics**, 2018.

1. M.J. Colbrook, X. Ma, P. Hopkins, J. Squire, *Scaling laws of passive-scalar diffusion in the interstellar medium*, **Monthly Notices of the Royal Astronomical Society**, 2017.

Conference proceedings

7. M.J. Colbrook, V. Antun, A.C. Hansen, *On the existence of stable and accurate neural networks for image reconstruction*, **SPARS**, 2019.

6. L.J. Ayton, M.J. Colbrook, A.S. Fokas, *The unified transform: A spectral collocation method for acoustic scattering*, **AIAA/CEAS Aeroacoustics**, 2019.

5. L.J. Ayton, M.J. Colbrook, T. Geyer, P. Chaitanya, E. Sarradj, *Modelling chordwise-varying porosity to reduce aerofoil-turbulence interaction noise*, **AIAA/CEAS Aeroacoustics**, 2021.

4. M.J. Colbrook, L.J. Ayton, *Non-linear Forchheimer corrections in acoustic scattering*, **AIAA/CEAS Aeroacoustics**, 2021.

3. M.J. Colbrook, A. Horning, *SpecSolve: Spectral methods for spectral measures*, **ICOSAHOM**, 2020+1.

2. H. Butt, S. Damani, S. Chaware, M. Szoke, S. Srivastava, T. Lowe, W. Devenport, A. Hales, M.J. Colbrook, L. Ayton, *Pressure Gradient Effects on Boundary Layer Superstructures*, **AIAA/CEAS Aeroacoustics**, 2023.

1. S. Mohammad-Taheri, M.J. Colbrook, S. Brugiapaglia, *OMP-Net: Neural network unrolling of weighted Orthogonal Matching Pursuit*, **CoSeRa**, 2024.

Outreach articles and interviews

1. S. Brunton, M.J. Colbrook, *Resilient data-driven dynamical systems with Koopman: An infinite-dimensional numerical analysis perspective*, **SIAM News**, 2023. [*Cover highlight*](#) for issue.

2. V. Antun, M.J. Colbrook, A.C. Hansen, *Proving existence is not enough: Mathematical paradoxes unravel the limits of neural networks in AI*, **SIAM News**, 2022. [*Cover highlight*](#) for issue.

3. M.J. Colbrook, V. Antun, A.C. Hansen, *Mathematical paradoxes unearth the boundaries of AI*, **TheScienceBreaker**, 2022.

4. M.J. Colbrook, *Unscrambling the Infinite: Can we Compute Spectra?*, **IMA Mathematics Today**, 2021.

5. *Some AI systems may be impossible to compute*, **IEEE spectrum** interview (world's leading engineering magazine). https://spectrum.ieee.org/deep-neural-network

6. *Mathematical paradox demonstrates the limits of AI*, interview for **University of Cambridge Research News**, 2022. https://www.cam.ac.uk/research/news/mathematical-paradox-demonstrates-the-limits-of-ai

7. *How maths can help artificial intelligence*, interview for **Trinity College Cambridge**, 2022. https://www.trin.cam.ac.uk/news/meet-the-jrf-dr-matthew-colbrook-explains-how-maths-can-help-ai/

FURTHER TEACHING (SEE BELOW), LEADERSHIP AND SERVICE ROLES

- **Chief organiser** of upcoming **Isaac Newton Institute programme**, *"Operator Theory for Dynamical Systems"*. This programme will bring together three distinct communities that study spectra of systems.
- Organising committee of *Deep learning, Dynamical systems and Data* conference, March 2024, UK.
- Organiser of minisymposia in computational mathematics at several conferences.
- 2021/2022: Co-organiser (and co-founder) of École Normale Supérieure's data science seminar series.
- 2022 – present: Organiser of Cambridge's applied and computational analysis seminar series.
- 2020-2022: Supervisor of several master's students at University of Oslo.
  Prize of supervisee Emil Haugen: [*NR's Master's Prize 2022*](#) for best mathematics master's thesis at UiO & NTNU.
- Teaching and lecturing of Cambridge mathematics courses, including in: approximation theory, complex analysis/methods, data science, functional analysis, machine learning, numerical analysis, numerical linear algebra.

Selected presentations at conferences and workshops

- Mini-Workshop: Geometric Integration, Cambridge — February 2025.
- Data-driven Modeling, Analysis, and Control of Dynamical Systems, Oberwolfach — December 2024.
- SIGMA, Centre International de Rencontres Mathématiques — October 2024.
- Mathematical Theory of Networks and Systems, Cambridge — August 2024.
- *Minicourse:* Mathematical Theory of Networks and Systems, Cambridge — August 2024.
- International Workshop on Operator Theory and its Applications, Kent — August 2024.
- Fourth Symposium on Machine Learning and Dynamical Systems, The Fields Institute — July 2024.
- British Mathematical Colloquium, University of Manchester — June 2024.
- Koopman Operator Theory: Fundamentals, Approximations and Applications, Otranto — May 2024.
- SIAM Conference on Applied Linear Algebra, Paris — May 2024.
- Exploiting Algebraic and Geometric Structure in Time-Integration Methods, Pisa — April 2024.
- PDE meets Data: Challenges and perspectives in model development and calibration, Warwick — September 2023.
- International Congress on Industrial and Applied Mathematics, Tokyo — August 2023.
- Numerical Analysis in the 21st Century, Oxford — August 2023.
- Complex analysis: techniques, applications and computations, Isaac Newton Institute — July 2023.
- 29th Biennial Numerical Analysis Conference — June 2023.
- **Leslie Fox Prize Lecture** — June 2023.
- Foundations of Computational Mathematics — June 2023.
- **10th Popov Prize Lecture, invited Semi-plenary Speaker:** Foundations of Computational Mathematics — June 2023.
- SIAM Conference on Applications of Dynamical Systems, Portland — May 2023.
- **Invited Plenary Speaker:** Differential-Algebraic Equations and Operator Pencils, BIRS — April 2023.
- Mathematical theory and applications of multiple wave scattering, Isaac Newton Institute — March 2023.
- SIAM Conference on Computational Science and Engineering, Amsterdam — March 2023.
- Joint Mathematics Meeting, Boston — January 2023.
- CMStatistics 2022, King's College London — December 2022.
- SIAM Conference on Mathematics of Data Science, San Diego — September 2022.
- Third Symposium on Machine Learning and Dynamical Systems, The Fields Institute — September 2022.
- IMA Conference on The Mathematical Challenges of Big Data, University of Oxford — September 2022.
- AIM Workshop: Computational mathematics in computer assisted proofs — September 2022.
- SIAM Conference on Nonlinear Waves and Coherent Structures, University of Bremen — August 2022.
- 27th Summer School on Dynamical Systems and Complexity, Chania, Crete — July 2022.
- **Invited Plenary Speaker:** 30th Birthday of Acta Numerica Conference, Bedlewo — June–July 2022.
- **Invited Plenary Speaker:** XXI Householder Symposium on Numerical Linear Algebra, Sierra Silvana — June 2022.
- Numerical Methods for Compression and Learning — May 2022.
- Isaac Newton Institute workshop on the mathematics of deep learning — October 2021.
- International Workshop on Operator Theory and its Applications (IWOTA) — August 2021.
- AIAA Aviation $\times 2$ — August 2021.
- SIAM Annual Meeting — July 2021.
- International Conference on Spectral High Order Methods (ICOSAHOM) $\times 2$ — July 2021.
- British Mathematical Colloquium (BMC) and British Applied Mathematics Colloquium (BAMC) — April 2021.
- Early Career Applied Mathematics Meeting — March 2021.
- Annual Meeting of the Australian Mathematical Society — December 2020.
- Canadian Mathematical Society Winter Meeting — December 2020.
- Computational Techniques and Applications Conference, **Prize:** Selected as highly commended — September 2020.
- British Early Career Mathematicians' Colloquium — July 2020.
- Isaac Newton Institute workshop on complex analysis — December 2019.
- Isaac Newton Institute workshop on the Wiener–Hopf technique — August 2019.
- Applied Inverse Problems Conference (AIP) — July 2019.
- 28th Biennial Numerical Analysis Conference — June 2019.
- Oxford-Cambridge Applied Mathematics Meeting — June 2019.
- Isaac Newton Institute workshop on the mathematics of deep learning and data science — May 2019.
- British Applied Mathematics Colloquium (BAMC) — April 2019.
- Measuring the Complexity of Computational Content (Dagstuhl) — September 2018.

Invited seminar talks

- Mathematics Seminar, Washington State University Vancouver — March 2025.
- Analysis Seminar, University of reading — February 2025.
- Applied and Interdisciplinary Mathematics Seminar, University of Bath — February 2025.
- Centro Euro-Mediterraneo sui Cambiamenti Climatici, University of Bologna — November 2024.

- Complex Systems Seminar, Technical University of Munich — June 2024.
- Machine Learning and Dynamical Systems Seminar, Alan Turing Institute — May 2024.
- Applied and Computational Mathematics Seminar, University of Edinburgh — February 2024.
- Centre for Complex Systems, Queen Mary University of London — February 2024.
- Joint Numerical Analysis and Applied Mathematics Seminar, University of Birmingham — September 2023.
- Imperial–UCL Numerics Seminar, Imperial College London — May 2023.
- eBrain Lab Seminar, Simon Fraser University — March 2023.
- G-34 Artificial Intelligence in Aviation Committee, online — February 2023.
- Applied and Computational Mathematics Seminar, University of Wisconsin–Madison — December 2022.
- PDEs Seminar, MIT — November 2022.
- Applied and Computational Mathematics Seminar, Dartmouth — November 2022.
- Mathematics Colloquium, Virginia Tech — November 2022.
- Aerospace and Ocean Engineering Seminar, Virginia Tech — November 2022.
- Mathematics Seminar, University of Washington — October 2022.
- Applied Mathematics Seminar, UC Berkeley — October 2022.
- Computational Mathematics Seminar, Caltech — October 2022.
- Applied and Computational Math Seminar, University of Minnesota — October 2022.
- MATHICSE Seminar, École Polytechnique Fédérale de Lausanne — June 2022.
- AudioVisual Communications Group Seminar, École Polytechnique Fédérale de Lausanne — June 2022.
- One World Seminar Mathematics of Machine Learning Seminar, online — May 2022.
- Applied and Computational Analysis Seminar, University of Cambridge — May 2022.
- Analysis & PDE Seminar, Cardiff University — March 2022.
- Numerical Analysis and Scientific Computing, University of Manchester — March 2022.
- Applied Mathematics Seminar, University of Warwick — March 2022.
- One World Optimization Seminar, online — February 2022.
- EMC2 Seminar, Ecole des Ponts — February 2022.
- One World Numerical Analysis Seminar, online — February 2022.
- Differential Equations, Numerical Analysis and Applications Seminar, University of Málaga — February 2022.
- Dynamical Systems and Nonlinear Control Seminar, UC Santa Barbara — December 2021.
- Quantitative Analysis and Verification Seminar, University of Oxford — December 2021.
- Numerical ODEs, Matrix Analysis and Data Science Seminar, Gran Sasso Science Institute — December 2021.
- Computational Mathematics and Applications Seminar, University of Oxford — November 2021.
- Scientific Computing and Numerics Seminar, Cornell University — November 2021.
- Machine Learning + X Seminar, Brown University — June 2021.
- Mathematical Foundations of Artificial Intelligence Seminar, LMU Munich — May 2021.
- Groupe de Travail du LJLL Seminar, Sorbonne Université/Université De Paris — May 2021.
- Mechanics Group Seminar, Cornell University — March 2021.
- Quantum Optics and Quantum Many-body Systems Seminar, University of Strathclyde — March 2021.
- Communications in Numerical Linear Algebra, online — October 2020.
- Collective Phenomena Group Seminar, University Cambridge — June 2020.
- Electronic Structure Group Seminar, University Cambridge — June 2020.
- Waves in Complex Continua, International Centre for Mathematical Sciences — May 2020.
- Applied and Interdisciplinary Mathematics Seminar & Numerical Analysis Seminar, University of Bath — May 2020.
- Applied Mathematics Seminar, UC Berkeley — May 2020.
- Imperial–UCL Numerics Seminar, Imperial College London — May 2019.
- Laplace Seminar Series, École Normale Supérieure — May 2019.
- Biomedical Imaging Seminar, École Polytechnique Fédérale de Lausanne — May 2019.
- Applied Partial Differential Equations Seminar, University of Washington — May 2019.
- Waves Group Seminar, University of Cambridge — February 2019.
- Applied and Computational Mathematics Seminar, UC Irvine — November 2018.
- Analysis and Applied Math Seminar, UC Berkeley — November 2018.
- Scientific Computing and Numerics Seminar, Cornell University — November 2018.

LECTURE COURSES I HAVE WRITTEN (lecture notes available upon request)
- "*Spectral Computations in Infinite Dimensions,*" University of Cambridge — 2024, 2025.
- "*Data-driven approximations of Koopman operators for dynamical systems,*" École Normale Supérieure — 2022.
- "*To infinity and beyond! A course on infinite-dimensional spectral computations,*" Gran Sasso Science Inst. — 2022.
- "*On the barriers of AI and the trade-off between stability and accuracy,*" 21st Geilo Winter School — 2021.

PHD STUDENTS
- George Coote, graduates 2027.

- Gustav Conradie, graduates 2027.
- April Herwig, graduates 2028.
- Sebastien Andre–Sloan, graduates 2028.

Mentored students
- Luca Gazdag (University of Oslo), graduates 2024.
- Alistair Hales (University of Cambridge), graduates 2024.
- Shiza Naqvi (University of Cambridge), graduates 2025.
- James Chok (University of Edinburgh), graduates 2026.
- Sina Mohammad–Taheri (Concordia University), visiting on a *[Mitacs Globalink Research Award](#)*, graduates 2025.
- Iryna Burak (Technical University of Munich), visiting on a *[David Crighton Fellowship](#)*, graduates 2025.

Postdocs
- Alexei Stepanenko (2023-2024).
- Joshua Bannister (2024).

Refereeing service
ACM Transactions on Mathematical Software, Applied and Computational Harmonic Analysis, Applied Mathematics Letters, Automatica, BIT Numerical Mathematics, Communications on Pure and Applied Mathematics, Computers and Mathematics with Applications, Constructive Approximation, ESAIM: Mathematical Modelling and Numerical Analysis, Forum of Mathematics: Sigma, Foundations of Computational Mathematics, IEEE Signal Processing Magazine, IEEE Transactions on Information Theory, IEEE Transactions on Knowledge and Data Engineering, IEEE Transactions on Pattern Analysis and Machine Intelligence, IEEE Transactions on Signal Processing, IMA Journal of Applied Mathematics, IMA Journal of Numerical Analysis, Inventiones Mathematicae, Information and Inference: a Journal of the IMA, Journal of Aerospace Engineering, Journal of Applied Analysis and Computation, Journal of Approximation Theory, Journal of Computational Dynamics, Journal of Computational Physics, Journal of Fourier Analysis and Applications, Journal of Machine Learning Research, Journal of Scientific Computing, Journal of Spectral Theory, Mathematics of Computation, Mathematical Theory of Networks and Systems, Nature Scientific Reports, Nonlinearity, Numerical Algorithms, Numerische Mathematik, Physica D: Nonlinear Phenomena, Physical Review Letters, Physical Review Fluids, Proceedings of the Royal Society A, Proc. SampTA, SIAM Journal on Applied Dynamical Systems, SIAM Journal on Applied Mathematics, SIAM Journal on Control and Optimization, SIAM Journal on Mathematics of Data Science, SIAM Journal on Matrix Analysis and Applications, SIAM Journal on Numerical Analysis, SIAM Journal on Scientific Computing, SIAM Review, Studies in Applied Mathematics, Systems & Control Letters, Zeitschrift für Naturforschung A, Cambridge University Press (for a book).