

## CURRICULUM VITAE – Alexander Schekochihin

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Google Scholar: <https://scholar.google.com/citations?user=tM5qGBwAAAAJ>

**University of Oxford, Department of Physics/Rudolf Peierls Centre for Theoretical Physics**  
2019- Head of Theoretical Astrophysics and Plasma Physics Group  
2014- Professor of Theoretical Physics  
2008- Fellow and Tutor in Physics, Merton College  
2008-14 University Lecturer (Associate Professor) in Theoretical Astrophysics  
**Imperial College London, Department of Physics**  
2006-08 Lecturer in Plasma Physics, RCUK Fellow & STFC Advanced Fellow  
**University of Cambridge, Department of Applied Mathematics & Theoretical Physics**  
2005-07 PPARC Advanced Fellow & Research Fellow at King's College  
2003-05 UKAFF Fellow & Research Fellow at Wolfson College  
**Imperial College London, Department of Physics**  
2002-03 Postdoctoral Research Associate (supervisor: S. C. Cowley)  
**University of California, Los Angeles, Department of Physics and Astronomy**  
2001 Postdoctoral Fellow (supervisor: S. C. Cowley)  
**Princeton University**  
1997-2001 PhD, Astrophysical Sciences (advisor: R. M. Kulsrud)  
1995-1997 MA, Astrophysical Sciences (advisor: J. A. Krommes)  
**Moscow Institute of Physics and Technology (МФТИ)**  
1990-1995 BSc *summa cum laude*, Applied Mathematics and Physics

### DISTINCTIONS, FELLOWSHIPS, etc.

2025 [MPLS Award for Outstanding Research Supervision](#), University of Oxford  
2022 [Simons Investigator](#) in Astrophysics  
2019 [J. Dawson Award for Excellence in Plasma Physics Research](#), American Physical Society  
2019 Fellow of the Institute of Physics, UK  
2019 [C. Payne-Gaposchkin Medal and Prize](#) for distinguished contributions to plasma, solar or space physics, Institute of Physics, UK  
2018, 22, 25 Professorial Merit Awards, University of Oxford  
2018 [Simons Visiting Professor](#), Niels Bohr International Academy, Copenhagen  
2017 Visiting Professor, Imperial College London  
2014 Member of the Royal Astronomical Society Club  
2012 [Fellow of the American Physical Society](#)  
2009 Professeur Invité, Université Pierre et Marie Curie (Paris VI)  
2008, 10 Visiting Fellow, Isaac Newton Institute, Cambridge  
2004 Fellow of the Royal Astronomical Society

### PUBLICATIONS, METRICS, CONFERENCES

185 refereed articles (including 33 PRL/PRX, 18 Nature/Science/PNAS etc.; full list [here](#)) + 1 submitted  
25 reports/proceedings/white papers  
 $N > 17,500$  citations, **h-index = 74**,  $i_{10} = 173$ ,  $i_{100} = 56$  ([Google Scholar](#))  
98 invited talks/lectures/reviews & 96 seminars/colloquia (selected list below)  
(co-)organiser or member of SOC for 34 conferences/workshops (selected list below)

### SERVICE (selected)

2024 Member of External Advisory Panel, [Instituto de Plasmas e Fusão Nuclear](#), IST, Lisbon  
2024 [Fellowship Committee](#), Division of Plasma Physics, American Physical Society  
2021-25 Member of [University Council](#), University of Oxford  
2018-23 Chair of Examiners, [MMathPhys/MScMTP degree](#), Oxford  
2013- [Editor-in-Chief](#) (with W. Dorland 2013-23, N. Loureiro 2025-), *Journal of Plasma Physics* (Cambridge U Press)  
2011-14 Member of Editorial Board, *Reports on Progress in Physics* (IoP)

**DPhil/PhD STUDENTS** (21 supervised+9 informal co-supervisions/collaborations; \*cont'd as postdocs)

- 2025- **A. Banerjee** (co-adv. A. Bott), Oxford Astro  
 2024- **R. Dutta** (co-adv. D. Kennedy), Oxford/UKAEA  
 2024- **J. Edmiston** (co-adv. D. A. Uzdensky & M. Fitzgerald), Oxford/UKAEA  
 2024- **A. Wierzchucka** (co-adv. D. A. Uzdensky), Oxford  
 2024-25 G. Celebre (adv. S. Servidio & F. Valentini), U of Calabria  
 2022- **L.-P. Turica** (co-adv. A. R. Field), Oxford/UKAEA  
 2021- **M. L. Nastac** (co-adv. M. Barnes), Oxford  
 2021- **W. A. Clarke** (co-adv. M. Barnes & C. M. Roach), Oxford/UKAEA  
 2021-25 **Y. Zhang** (co-adv. M. Barnes), Oxford/TE Ltd → *postdoc*, UKAEA  
 2020-24 **R. J. Ewart**, Oxford, **EPS PhD Award** → *SCEECs Fellow*, Princeton & U Maryland  
 2018-23\*23 **T. G. Adkins**, Oxford/UKAEA, **EPS PhD Award** → *now postdoc*, PPPL, Princeton  
 2018-22 **D. N. Hosking** (co-adv. S. A. Balbus), Oxford Astro, **EPS PhD Award**, **IAU PhD Prize**, **RAS M. Penston Thesis Prize** → *now JRF*, *Gonville & Caius College*, Cambridge  
 2018-19\*22 **D. A. St-Onge** (adv. M. W. Kunz), Princeton → *now at Vola Dynamics LLC*, Canada  
 2016-21\*24 **P. G. Ivanov**, Oxford/UKAEA, **EPS PhD Award** → *now research staff*, UKAEA  
 2015-19 **A. F. A. Bott** (co-adv. G. Gregori), Oxford, **EPS PhD Award** → *now UKRI FLF*, Oxford  
 2012-17 **L. F. van Wyk** (co-adv. E. G. Highcock), Oxford/UKAEA → *Bloomberg LP*, London  
 2012-17 **M. F. J. Fox** (co-adv. A. R. Field), Oxford/UKAEA → *now Sr. Teaching Fellow*, Imperial  
 2013-16 **S. V. Komarov** (adv. E. M. Churazov), MPA Garching → *now at Machine Medicine Tech.*, London  
 2010-16 J. T. Parker (adv. P. J. Dellar), Oxford Maths → *STFC Sci. Comp. Dept*, Rutherford Appleton Lab.  
 2009-16 **G. J. Colyer**, Oxford/UKAEA → *now postdoc*, *Dept of Eng. Sci. & Lecturer*, Trinity College, Oxford  
 2009-16 **A. Mallet**, Oxford Astro → *now Asst. Researcher*, *Space Science Laboratory*, UC Berkeley  
 2009-15 **A. V. Kanekar** (adv. W. Dorland), U of Maryland → *now at Protocol Labs*, London  
 2009-12 **Y.-c. Ghim** (co-adv. A. R. Field), Oxford/UKAEA → *now Professor*, KAIST  
 2007-12\*13 **I. G. Abel**, Oxford/UKAEA → *now Asst. Research Scientist*, U Maryland  
 2007-12\*16 **E. G. Highcock**, Oxford/UKAEA, **EPS PhD Award** → *now at Power Factors*, Sweden  
 2007-10 **C. H. K. Chen** (adv. T. S. Horbury), Imperial → *now Reader*, *Queen Mary U London*  
 2006-10 **M. S. Rosin**, Cambridge → *now Assoc. Professor*, *Pratt Institute*, New York  
 2008-09 **G. G. Plunk** (adv. S. C. Cowley), UCLA → *now Staff Scientist*, IPP, Greifswald  
 2005-09 **A. H. Waelkens** (adv. T. A. Enßlin), MPA Garching → *now at Airbus*, Munich  
 2002-05\*09 **N. F. Loureiro** (adv. M. G. Haines), Imperial → *now Professor & Director of PSFC*, MIT

**POSTDOCS, RESEARCH FELLOWS** (incl. in co-supervision; not incl. former DPhil/PhD advisees)

- 2025- I. Khabibullin (STFC & Simons Foundation)  
 2025- **P. J. Bilbao** (Leverhulme-Peierls Fellow; co-superv. D. Uzdensky)  
 2025- **R. Nies** (Leverhulme-Peierls Fellow; co-superv. M. Barnes)  
 2023-24 **R. Greif** (EPSRC; co-superv. M. Barnes)  
 2023- Y. B. Ginat (Leverhulme-Peierls Fellow; co-superv. B. Kocsis)  
 2023-25 **P. Reichherzer** (Gateway & W. Benjamin Fellow; co-superv. G. Gregori) → *res. fellow*, Princeton  
 2022-24 **N. A. Lopez** (STFC; co-superv. G. Gregori) → *research staff*, Tokamak Energy Ltd  
 2019- **J. Ruiz Ruiz** (EPSRC Fellow; co-superv. F. Parra & M. Barnes)  
 2019-22 **M. Hardman** (EPSRC; co-superv. F. Parra & M. Barnes) → *now research staff*, UKAEA  
 2016-19 **Y. Kawazura** (STFC; co-superv. M. Barnes) → *now Assoc. Professor*, *Utsunomiya U*, Japan  
 2016-17 **T. G. White** (EPSRC; co-superv. G. Gregori) → *now Assoc. Professor*, *U Nevada*, Reno  
 2015-17 M. Strumik (Marie Curie Fellow) → *Space Research Centre*, *Polish Academy of Sciences*  
 2009-13 **A. Zocco** (WPI, EFDA & CCFE Fellow) → *Staff Scientist*, IPP, Greifswald  
 2009-11 **M. W. Kunz** (STFC & JRF Mansfield) → *now Assoc. Professor*, Princeton  
 2009-11 **F. I. Parra** (JRF Ch. Ch. & EPSRC Fellow) → *now Prof.*, *Princeton & Head of Theory*, PPPL  
 2009-11 **M. A. Barnes** (Oxford-Culham Fellow) → *now Professor*, Oxford  
 2007-08 **A. B. Isakov** (UCLA & WPI; co-superv. S. Cowley) → *now at Inst. of Control Sci.*, Moscow  
 2005-09 **T. A. Yousef** (UKAFF, Isaac Newton Trust, STFC) → *now at Technip Energies*, Paris

**SELECTED INVITED TALKS, COLLOQUIA & CONFERENCE LEADERSHIP** (since 2005)

- 2008-19,22-26 **Principal Organiser**, Annual Plasma Kinetics Workshops, W. Pauli Institute, Vienna  
 2010,14,19,22-26 **Invited Speaker**, Physics of Intracluster Medium: Theory & Computation Conf. Series (bi-annual)  
 2026 **Invited Speaker**, New Directions in Theoretical Physics, Higgs Centre, University of Edinburgh  
 2025 **Member of SOC**, Magnetic Fields and Cosmic Rays across Diverse Scales, CFA, Harvard & Smithsonian  
 2023,25 **Co-organiser**, Simons Symposium on Multiscale Physics, Schloss Elmau, Germany  
 2025 **Member of SOC**, Sherwood Fusion Theory Conference, New York  
 2024 **Invited Speaker**, Theory Colloquium, Princeton Plasma Physics Laboratory

2024 *Scientific Advisor*, Kinetic Theory of Plasmas & Self-Gravitating Systems, KITP, Santa Barbara

2024 *Member of SOC*, PLASMA Science Summer School, Porquerolles, France

2024 *Invited Speaker*, Physics Department Colloquium, University of Bath

2024 *Invited Panellist*, Synergistic Approaches to Particle Transport in Magnetized Turbulence, PCTS, Princeton

2024 *Invited Speaker*, Physics Colloquium, University of Pisa, Italy

2013,16,24 *Invited/Keynote Speaker*, Vlasovia: Int'l Conference on Theory & Applications of the Vlasov Equation

2023 *Invited Review*, Cosmic Turbulence and Magnetic Fields, IESC, Cargèse, Corsica

2023 *Invited Speaker*, Colloque de l'Institut d'Astrophysique de Paris

2007,13-19,23 *Invited Lecturer*, École de Physique des Houches (bi-annual plasma physics sessions)

2023 *Invited Speaker*, Working Across Scales in Complex Systems, Emory University, Atlanta

2022 *Invited Speaker*, Institute for Advanced Studies/Princeton Joint Astrophysics Colloquium, Princeton

2022 *Invited Speaker*, AlbaNova/NORDITA Colloquium, Stockholm

2022 *Invited Speaker*, Turbulent Dissipation in Space Plasmas, Royal Society Meeting, Nottingham

2021 *Plenary Review*, 63rd Annual Meeting of APS Division of Plasma Physics, Pittsburgh

2021 *Invited Speaker*, MHD: Physics for the 21st Century, Lorentz Center, Leiden

2021 *Invited Speaker*, Astrophysics Colloquium, MIT

2020 *Invited Speaker*, Laboratory Astrophysics with Intense Lasers, IIT, Hyderabad

2020 *Invited Speaker*, Russian National Festival of Science

2019 *Scientific Advisor*, Multiscale Phenomena in Plasma Astrophysics, KITP, Santa Barbara

2019 *Invited Speaker*, Waves Côte d'Azur, Nice

2015,19 *Invited Speaker*, International Sherwood Fusion Theory Conference

2019 *Keynote Review*, International Conference on High-Energy-Density Science, Oxford

2018 **Organiser**, Simons Program on Plasma Physics & Astrophysics, NBIA, Copenhagen

2017 **Principal Organiser**, JPP Frontiers in Plasma Physics Conference, Spineto, Tuscany

2017 *Invited Speaker*, JCBA Colloquium, University of Manchester

2016 *Invited Speaker*, Magnetisation of Interstellar & Intergalactic Media, Berlin

2016 *Invited Speaker*, NJ Fisch Symposium: Solved & Unsolved Problems in Plasma Physics, Princeton

2016 *Invited Speaker*, MIPSE Colloquium, University of Michigan, Ann Arbor

2015 *Invited Speaker*, 16th European Fusion Theory Conference, Lisbon

2015 *Member of SOC*, Turbulence & Dissipation in Collisionless Astrophys. Plasmas, IESC, Cargèse, Corsica

2015 *Invited Speaker*, ICM Physics & Modelling, MPA, Garching, Germany

2015 *Invited Lecturer*, Int'l School on Geodynamo, ICTS, Bangalore

2010,15 *Invited Participant & Speaker*, International Space Sciences Institute, Bern, Switzerland

2007,14 *Invited Speaker*, High-Energy Astrophysics Today and Tomorrow, IKI, Moscow

2014 *Invited Speaker*, Inhomogeneities in Intracluster Plasma, KIPAC, Stanford

2014 *Invited Speaker*, 41st EPS Conference on Plasma Physics, Berlin

2013 *Member of Program Committee*, Stability, Energetics, & Turbulent Transport in Plasmas, PCTS, Princeton

2012 *Invited Speaker*, Future Directions for Dynamo Research, Madison, Wisconsin

2012 *Invited Speaker*, Tangled Magnetic Fields in Astro- & Plasma Physics, ICMS, Edinburgh

2012 *Invited Lecturer*, 1st Euro. School on Fundamental Processes in Space Weather, Spineto, Italy

2012 *Invited Speaker*, IPP Colloquium, Max Planck Inst. for Plasma Physics, Greifswald, Germany

2011 *Member of International Advisory Committee*, Int'l Astrophysics Forum, Alpbach, Tirol

2011 *Invited Speaker*, April Meeting of APS, Anaheim, California

2011 *Invited Speaker*, 478th Heraeus Seminar: Fusion & Astrophysical Plasmas, Bad Honnef

2011 *Invited Speaker*, Astrophysics & Cosmology with Galaxy Clusters, KITP, Santa Barbara

2010 *Invited Speaker*, Munich Joint Astronomy Colloquium, ESO, Garching, Germany

2010 *Invited Speaker*, Non-thermal Phenomena in Colliding Galaxy Clusters, Nice

2010 **Principal Organiser**, Gyrokinetics in Laboratory & Astrophysical Plasmas, INI, Cambridge

2010 *Invited Speaker*, Self-Organization in Turbulent Plasmas & Fluids, Dresden

2009 *Keynote Lecture*, Plasmas, Computation & Mathematics, Ambleside, UK

2009 *Invited Speaker*, 12th International Solar Wind Conference, Saint-Malo, France

2009 *Invited Lecturer*, School on Astrophysical Turbulence & Dynamos, ICTP, Trieste

2009 *Member of SOC*, Plasma Instabilities & Turbulence in Fusion Plasmas, IoP Meeting, U. of Warwick

2009 *Invited Lecturer*, Frontiers in Dynamo Theory, Institut Henri Poincaré, Paris

2005-09 *Invited Lecturer*, Annual CMPD Winter Schools on Plasma Physics, UCLA

2008 *Co-organiser*, Structures and Waves in Anisotropic Turbulence, INI Satellite Meeting, Warwick

2008 *Invited Speaker*, Kinetic Modeling of Astrophysical Plasmas, Cracow, Poland

2008 *Invited Speaker*, Theory of Fusion Plasmas, Villa Monastero, Varenna, Italy

2008 *Invited Speaker*, Saturation & Transport Properties of MRI Turbulence, IAS, Princeton

2008 *Invited Speaker*, 35th EPS Conference on Plasma Physics, Hersonissos, Crete

2008 *Invited Speaker*, 1st NILES Int'l Workshop on Lasers & Plasmas, Cairo, Egypt

2005,07 *Invited Speaker*, Festivals de Théorie, Aix-en-Provence, France

2007 *Invited Lecturer*, 2nd Int'l School on Advanced Computing & Simulation, Cambridge

2007 *Invited Speaker*, EGU General Assembly, Vienna

2007 *Invited Speaker*, Institute of Astronomy Colloquium, Cambridge

2006 *Invited Speaker*, Grand Challenge Problems in Computational Astrophysics, IPAM, UCLA

2006 *Invited Speaker*, Instabilities and Turbulence in MHD Flows, U. of Warwick

2006 *Invited Review*, 13th International Congress on Plasma Physics, Kiev, Ukraine

2005 *Invited Speaker*, 47th Annual Meeting of APS Division of Plasma Physics, Denver