

CURRICULUM VITAE – Alexander Schekochihin

The Rudolf Peierls Centre for Theoretical Physics
University of Oxford, Oxford OX1 3PU
Tel. +44 1865 273 980

Merton College, Oxford OX1 4JD
Tel. +44 1865 286 501
Mobile +44 7766138996

URL: <http://www.thphys.physics.ox.ac.uk/people/AlexanderSchekochihin/> E-mail: alex.schekochihin@physics.ox.ac.uk
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.

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 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

173 refereed articles (including 32 PRL/PRX, 16 Nature/Science/PNAS etc.; full list [here](#)) + 6 submitted
25 reports/proceedings/white papers
 $N > 15,700$ citations, **h-index = 71**, $i_{10} = 163$, $i_{100} = 50$ ([Google Scholar](#))
96 invited talks/lectures/reviews & 94 seminars/colloquia (selected list below)
(co-)organiser or member of SOC for 31 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- Member of **University Council**, University of Oxford
2018-23 Chair of Examiners, **MMathPhys/MScMTP degree**, Oxford
2013- **Editor-in-Chief** (with W. Dorland till 2023), *Journal of Plasma Physics* (Cambridge U Press)
2011-14 Member of Editorial Board, *Reports on Progress in Physics* (IoP)

DPhil/PhD STUDENTS (20 supervised+9 informal co-supervisions/collaborations; *cont'd as postdocs)

- 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- G. Celebre (adv. S. Servidio & F. Valentini), U of Calabria
 2022- **L.-P. Turica** (co-adv. A. R. Field), Oxford/UKAEA
 2021- **Y. Zhang** (co-adv. M. Barnes), Oxford/TE Ltd
 2021- **W. Clarke** (co-adv. M. Barnes & C. M. Roach), Oxford/UKAEA
 2021- **M. L. Nastac** (co-adv. M. Barnes), Oxford
 2020-24 **R. J. Ewart**, Oxford → *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* → *PCTS Fellow, Princeton & JRF, G&C Coll. 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* → *postdoc, EPFL, Switzerland*
 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 Sen. 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, AOPP, 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 Assoc. Prof., 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. Prof., 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 Prof. & Director of PSFC, MIT*

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

- 2025- **R. Nies** (Leverhulme-Peierls Fellow; co-superv. S. Sondhi)
 2025- T. Mondal (STFC; co-superv. G. Gregori)
 2023- **R. Greif** (EPSRC; co-superv. M. Barnes)
 2023- Y. B. Ginat (Leverhulme-Peierls Fellow; co-superv. S. Sondhi)
 2023- **P. Reichherzer** (Gateway & W. Benjamin Fellow; co-superv. G. Gregori)
 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. Prof., Utsunomiya U, Japan*
 2016-17 **T. G. White** (EPSRC; co-superv. G. Gregori) → *now Assoc. Prof., 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. Prof., 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 Prof., 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)

- 2023,25 **Co-organiser**, Simons Symposium on Multiscale Physics, Schloss Elmau, Germany
 2008-19,22-25 **Principal Organiser**, Annual Plasma Kinetics Workshops, W. Pauli Institute, Vienna
 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
 2010,14,19,22,24 **Invited Speaker**, Physics of Intracluster Medium: Theory & Computation Conf. Series
 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