

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 77661389

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 of King's College
2003-05 UKAFF Fellow & Research Fellow of 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

172 refereed articles (including 32 PRL/PRX, 15 Nature/Science/PNAS etc.; full list [here](#)) + 5 submitted
25 reports/proceedings/white papers
 $N > 15,200$ citations, **h-index = 68**, $i_{10} = 159$, $i_{100} = 49$ ([Google Scholar](#))
96 invited talks/lectures/reviews & 93 seminars/colloquia (selected list below)
(co-)organiser or member of SOC for 29 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), <i>Journal of Plasma Physics</i> (Cambridge U Press)
2011-14	Member of Editorial Board, <i>Reports on Progress in Physics</i> (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. Wierzychucka (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 → <i>now postdoc</i> , U Otago, NZ
2018-22	D. N. Hosking (co-adv. S. A. Balbus), Oxford Astro, EPS PhD Award , IAU PhD Prize , RAS M. Penston Thesis Prize → <i>PCTS Fellow</i> , Princeton & JRF, <i>G&C Coll. Cambridge</i>
2018-19*22	D. A. St-Onge (adv. M. W. Kunz), Princeton → <i>now at Vola Dynamics LLC, Canada</i>
2016-21*24	P. G. Ivanov , Oxford/UKAEA, EPS PhD Award → <i>postdoc</i> , EPFL, Switzerland
2015-19	A. F. A. Bott (co-adv. G. Gregori), Oxford, EPS PhD Award → <i>now UKRI FLF, Oxford</i>
2012-17	L. F. van Wyk (co-adv. E. G. Highcock), Oxford/UKAEA → <i>Bloomberg LP, London</i>
2012-17	M. F. J. Fox (co-adv. A. R. Field), Oxford/UKAEA → <i>now Sen. Teaching Fellow, Imperial</i>
2013-16	S. V. Komarov (adv. E. M. Churazov), MPA Garching → <i>now at Machine Medicine Tech., London</i>
2010-16	J. T. Parker (adv. P. J. Dellar), Oxford Maths → <i>STFC Sci. Comp. Dept, Rutherford Appleton Lab.</i>
2009-16	G. J. Colyer , Oxford/UKAEA → <i>now postdoc, AOPP, Oxford</i>
2009-16	A. Mallet , Oxford Astro → <i>now Asst. Researcher, Space Science Laboratory, UC Berkeley</i>
2009-15	A. V. Kanekar (adv. W. Dorland), U of Maryland → <i>now at Protocol Labs, London</i>
2009-12	Y.-c. Ghim (co-adv. A. R. Field), Oxford/UKAEA → <i>now Assoc. Prof. (tenured), KAIST</i>
2007-12*13	I. G. Abel , Oxford/UKAEA → <i>now Asst. Research Scientist, U Maryland</i>
2007-12*16	E. G. Highcock , Oxford/UKAEA, EPS PhD Award → <i>now at Power Factors, Sweden</i>
2007-10	C. H. K. Chen (adv. T. S. Horbury), Imperial → <i>now Reader, Queen Mary U London</i>
2006-10	M. S. Rosin , Cambridge → <i>now Assoc. Prof., Pratt Institute, New York</i>
2008-09	G. G. Plunk (adv. S. C. Cowley), UCLA → <i>now Staff Scientist, IPP, Greifswald</i>
2005-09	A. H. Waelkens (adv. T. A. Enßlin), MPA Garching → <i>now at Airbus, Munich</i>
2002-05*09	N. F. Loureiro (adv. M. G. Haines), Imperial → <i>now Prof. & Director of PSFC, MIT</i>

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

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

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

2008-19,22-24	Principal Organiser , Annual Plasma Kinetics Workshops, W. Pauli Institute, Vienna
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
2023 **Co-organiser**, Simons Symposium on Multiscale Physics, Schloss Elmau, Germany
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