

## 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 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**

160 refereed articles (including 31 PRL/PRX, 13 Nature/Science/PNAS etc.; full list [here](#)) + 4 submitted

25 reports/proceedings/white papers

$N > 13,300$  citations, **h-index = 62**,  $i_{10} = 143$ ,  $i_{100} = 46$  ([Google Scholar](#))

93 invited talks/lectures/reviews & 89 seminars/colloquia (selected list below)

(co-)organiser or member of SOC for 27 conferences/workshops (selected list below)

## SERVICE (selected)

- 2021- Member of [University Council](#), Oxford  
2018- Chair of Examiners, [MMathPhys/MScMTP degree](#), Oxford  
2013- [Co-Editor-in-Chief](#) (with W. Dorland), *Journal of Plasma Physics* (Cambridge U Press)  
2011-14 Member of Editorial Board, *Reports on Progress in Physics* (IoP)

## DPhil/PhD STUDENTS (17 formally supervised+7 informal collaborations/co-superv.; \*cont'd as postdocs)

- 2022- **L.-P. Turica** (co-adv. A. R. Field), Oxford/UKAEA  
2021- **Y. Zhang** (co-adv. M. Barnes), Oxford/TE  
2021- **W. Clarke** (co-adv. M. Barnes & C. M. Roach), Oxford/UKAEA  
2021- **M. L. Nastac** (co-adv. M. Barnes), Oxford  
2020- **R. J. Ewart**, Oxford  
2018-23\* **T. G. Adkins** (co-adv. C. M. Roach), Oxford/UKAEA → *now postdoc, Oxford*  
2018-22 **D. N. Hosking** (co-adv. S. A. Balbus), Oxford Astro, [EPS PhD Award 2023](#) → *PCTS Fellow, Princeton & JRF, G&C*  
2016-21\* **P. G. Ivanov**, Oxford/UKAEA, [EPS PhD Award 2022](#) → *now postdoc, Oxford*  
2018-19 D. A. St-Onge (adv. M. W. Kunz), Princeton → *postdoc, Oxford*  
2015-19 **A. F. A. Bott** (co-adv. G. Gregori), Oxford, [EPS PhD Award 2020](#) → *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 postdoc, 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 → *Palantir Technologies, London*  
2009-12 **Y.-c. Ghim** (co-adv. A. R. Field), Oxford/UKAEA → *now Assoc. Prof. (tenured), KAIST*  
2007-12\* **I. G. Abel**, Oxford/UKAEA → *now Asst. Research Scientist, U Maryland*  
2007-12\* **E. G. Highcock**, Oxford/UKAEA, [EPS PhD Award 2014](#) → *now at Power Factors, Sweden*  
2007-10 C. H. K. Chen (adv. T. S. Horbury), Imperial → *now Sen. Lecturer, Queen Mary U London*  
2006-10 **M. S. Rosin**, Cambridge → *now Assoc. Prof., Pratt Institute, New York*  
2005-09 A. H. Waelkens (adv. T. A. Enßlin), MPA Garching → *now at Airbus, Munich*  
2002-05 N. F. Loureiro (adv. M. G. Haines), Imperial → *now Prof., MIT*

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

- 2023- B. Ginat (Leverhulme-Peierls Fellow; co-superv. S. Sondhi)  
2023- P. Reichherzer (Gateway & W. Benjamin Fellow; co-superv. G. Gregori)  
2022- N. A. Lopez (STFC; co-superv. G. Gregori)  
2019- J. Ruiz Ruiz (EPSRC Fellow; co-superv. F. Parra & M. Barnes)  
2019-22 M. Hardman (EPSRC; co-superv. F. Parra & M. Barnes) → *research staff at Tokamak Energy Ltd*  
2016-19 Y. Kawazura (STFC; co-superv. M. Barnes) → *Asst. Prof., Tohoku U, Japan*  
2016-17 T. G. White (EPSRC; co-superv. G. Gregori) → *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) → *research staff at IPP, Greifswald*  
2009-11 M. W. Kunz (STFC & JRF Mansfield) → *now Assoc. Prof. (tenured), 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. Iskakov (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)

- 2024 *Scientific Advisor*, Kinetic Theory of Plasmas & Self-Gravitating Systems, KITP, Santa Barbara  
2023 **Co-organiser**, Simons Symposium on Multiscale Physics, Schloss Elmau, Germany  
2008-19,22-23 **Principal Organiser**, Annual Plasma Kinetics Workshops, W. Pauli Institute, Vienna  
2023 *Invited Review*, Cosmic Turbulence and Magnetic Fields, IESC, Cargèse, Corsica  
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

2010,14,19,22 *Invited Speaker*, Physics of Intracluster Medium: Theory & Computation Conf. Series

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

2013,16 *Invited Speaker*, Vlasovia: Int'l Workshops on Theory & Applications of Vlasov Equation

2016 *Invited Speaker*, NJ Fisch Symposium: Solved & Unsolved Problems in Plasma Phys., 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 Programme Committee*, Stability, Energetics, & Turbulent Transport in Astrophysical, Fusion, & Solar 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 School 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*, Festival 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