

# CURRICULUM VITAE—Alexander A Schekochihin

The Rudolf Peierls Centre for Theoretical Physics  
University of Oxford  
Clarendon Laboratory, Parks Road, Oxford OX1 3PU  
<http://www-thphys.physics.ox.ac.uk/people/AlexanderSchekochihin/>

Tel. +44 7766 13 8996 (mobile)  
+44 1865 273 980 (office)  
Fax +44 1865 273 947  
[alex.schekochihin@physics.ox.ac.uk](mailto:alex.schekochihin@physics.ox.ac.uk)

- 
- EMPLOYMENT**
- **University of Oxford, Dept. of Physics/R. Peierls Centre for Theoretical Physics**  
Professor of Theoretical Physics from 2014  
University Lecturer in Theoretical Astrophysics and Fellow of Merton College from 2008
  - **Imperial College London, Dept. of Physics**  
Lecturer in Plasma Physics, RCUK Fellow and STFC Advanced Fellow 2006–08
  - **University of Cambridge, Dept. of Applied Mathematics and Theoretical Physics**  
PPARC Advanced Fellow and Research Fellow of King’s College 2005–07  
UKAFF Fellow and Research Fellow of Wolfson College 2003–05
  - **Imperial College London, Dept. of Physics**  
Postdoctoral Research Associate (supervisor: S. C. Cowley) 2002–03
  - **University of California Los Angeles, Dept. of Physics and Astronomy**  
Postdoctoral Fellow (supervisor: S. C. Cowley) 2001
- EDUCATION**
- **Princeton University** 1995–2000  
Ph. D., Astrophysical Sciences (adviser: R. M. Kulsrud) January 2001  
M. A., Astrophysical Sciences (adviser: J. A. Krommes) November 1997
  - **Moscow Institute of Physics and Technology** 1990–93, 94–95  
B. Sc. *summa cum laude*, Applied Mathematics and Physics June 1995
- OTHER FELLOWSHIPS**
- Simons Visiting Professor, Niels Bohr International Academy, Copenhagen 2018, 2019
  - Visiting Professor, Imperial College London since 2017
  - Fellow of the American Physical Society since 2012
  - Professeur Invité, Université Pierre et Marie Curie (Paris VI) 2009
  - Visiting Fellow, Isaac Newton Institute, Cambridge 2008, 2010
- PhD/DPhil STUDENTS (including in collaborations)**
- D. Hosking (co-adv. S. A. Balbus), Oxford 2018–
  - T. Adkins (co-adv. C. R. Roach), Oxford/CCFE 2018–
  - L. M. Milanese (main adv. N. F. Loureiro), MIT 2017–
  - P. G. Ivanov (co-adv. A. R. Field), Oxford/CCFE 2016–
  - A. F. A. Bott (co-adv. G. Gregori), Oxford 2015–19
  - L. F. van Wyk (co-adv. E. G. Highcock), Oxford/CCFE→*Bloomberg IT, London* 2012–17
  - M. F. J. Fox (co-adv. A. R. Field), Oxford/CCFE→*teacher, St Olave’s Gr. School* 2012–17
  - S. V. Komarov (main adv. E. M. Churazov), MPA Garching→*now postdoc, Cambridge* 2013–16
  - J. T. Parker (main adv. P. J. Dellar), Oxford Maths→*postdoc, STFC RAL* 2010–16
  - G. J. Colyer, Oxford/CCFE→*postdoc, U. of Exeter* 2009–16
  - A. Mallet, Oxford→*now NSF Fellow, U. of New Hampshire* 2009–16
  - A. V. Kanekar (main adv. W. Dorland), U. of Maryland→*IT industry, London* 2009–15
  - Y.-c. Ghim (co-adv. A. R. Field), Oxford/CCFE→*Asst. Prof., KAIST, Korea* 2009–12
  - I. G. Abel, Oxford/CCFE→*PCTS Fellow, Princeton* 2007–12
  - E. G. Highcock (EPS PhD Award 2014), Oxford/CCFE→*now postdoc, Chalmers* 2007–12
  - C. H. K. Chen (main adv. T. S. Horbury), Imperial→*now Lecturer, Queen Mary* 2007–10
  - M. S. Rosin, Cambridge→*now Asst. Prof., Pratt Inst., New York* 2006–10
  - A. H. Waelkens (main adv. T. A. Enßlin), MPA Garching→*industry, Germany* 2005–09
  - N. F. Loureiro (main adv. M. G. Haines), Imperial→*now Assoc. Prof., MIT* 2002–05
- POSTDOCS & JRFs**
- Y. Kawazura (STFC PDRA) 2016–19
  - T. G. White (STFC PDRA)→*Asst. Prof., U. Nevada, Reno* 2016–17
  - M. Strumik (Marie Curie Fellow)→*Space Res. Centre, Polish Academy of Sci.* 2015–17
  - A. Zocco (WPI, EFDA & CCFE Fellow)→*now at IPP, Greifswald* 2009–13
  - M. W. Kunz (STFC PDRA, JRF Mansfield)→*now Asst. Prof., Princeton* 2009–11
  - F. I. Parra (JRF Christ Church & EPSRC Fellow)→*now Assoc. Prof., Oxford* 2009–11
  - M. A. Barnes (Oxford-Culham Fellow)→*now Assoc. Prof., Oxford* 2009–11
  - A. B. Iskakov (UCLA & WPI PDRA)→*now at Inst. of Control Sciences, Moscow* 2007–08
  - T. A. Yousef (UKAFF, I. Newton Trust, STFC PDRA)→*oil industry, London* 2005–09
- PUBLICATIONS, ED. BOARDS**
- 120 refereed journal articles (incl. 26 PRLs, 6 Nature/Science/PNAS etc.)
  - $N > 7400$  citations,  $h = 50$ ,  $i_{10} = 105$ ,  $i_{100} = 22$  (Google Scholar)
  - 80 invited talks & 76 seminars; (co-)organiser or member of SOC for 23 conferences
  - Editor (with W. Dorland), *Journal of Plasma Physics* (Cambridge U. Press) from 2013
  - Member of Editorial Board, *Reports on Progress in Physics* (IoP) 2011–14
- LANGUAGES**
- English (fluent), Russian (native speaker), French, Italian (halting)

# PUBLICATION LIST

Alexander A. Schekochihin

## BOOK CHAPTERS and REVIEWS

1. A. A. Schekochihin and S. C. Cowley,  
“**Turbulence and magnetic fields in astrophysical plasmas,**”  
in: *Magnetohydrodynamics: Historical Evolution and Trends*, S. Molokov, R. Moreau, and H. K. Moffatt, Eds. (Berlin: Springer, 2007), 85 [e-print astro-ph/0507686]
  2. I. G. Abel, G. G. Plunk, E. Wang, M. Barnes, S. C. Cowley, W. Dorland, and A. A. Schekochihin,  
“**Multiscale gyrokinetics for rotating tokamak plasmas: Fluctuations, transport and energy flows,**”  
*Rep. Prog. Phys.* **76**, 116201 (2013) [e-print arXiv:1209.4782]
- ⇒ See papers 3, 18, 19, 20, 29, 32, 41, 47, 56, 91 below, which contain elements of review as well as original results

## JOURNAL PAPERS

### Submitted

122. Y. Kawazura, M. Barnes, and A. A. Schekochihin,  
“**Thermal disequilibrium of ions and electrons by collisionless plasma turbulence,**”  
*Proc. Nat. Acad. Sci.*, submitted (2018)
121. T. G. White, M. T. Oliver, P. Mabey, M. Kühn-Kauffeldt, A. Bott, L. Döhl, A. Bell, R. Bingham, R. Clarke, J. Foster, G. Giacinti, P. Graham, R. Heathcote, M. Koenig, Y. Kuramitsu, D. Q. Lamb, J. Meinecke, T. Michel, F. Miniati, M. Notley, B. Reville, D. Ryu, S. Sarkar, Y. Sakawa, M. P. Selwood, J. Squire, R. H. H. Scott, P. Tzeferacos, N. Woolsey, A. A. Schekochihin, and G. Gregori,  
“**Supersonic plasma turbulence in the laboratory,**”  
*Nature Comm.*, submitted (2018)

### Published/accepted

2018

120. C. Zhang, E. Churazov, and A. A. Schekochihin,  
“**Generation of internal waves by buoyant bubbles in galaxy clusters and heating of intracluster medium,**”  
*Mon. Not. R. Astron. Soc.* **478**, 4785 (2018) [e-print arXiv:1802.09078]
119. M. W. Kunz, I. G. Abel, K. G. Klein, and A. A. Schekochihin,  
“**Astrophysical gyrokinetics: turbulence in pressure-anisotropic plasmas at ion scales and beyond,**”  
*J. Plasma Phys.* **84**, 715840201 (2018) [e-print arXiv:1712.02269]
118. S. V. Komarov, E. M. Churazov, A. A. Schekochihin, and A. Spitkovsky,  
“**Self-inhibiting thermal conduction in a high-beta, whistler-unstable plasma,**”  
*J. Plasma Phys.* **84**, 905840305 (2018) [e-print arXiv:1711.11462]
117. T. Adkins and A. A. Schekochihin,  
“**A solvable model of Vlasov-kinetic plasma turbulence in Fourier-Hermite phase space,**”  
*J. Plasma Phys.* **84**, 905840107 (2018) [e-print arXiv:1709.03203]
116. P. Tzeferacos, A. Rigby, A. F. A. Bott, A. R. Bell, R. Bingham, A. Casner, F. Cattaneo, E. M. Churazov, J. Emig, F. Fiuza, C. B. Forest, J. Foster, C. Graziani, J. Katz, M. Koenig, C.-K. Li, J. Meinecke, R. Pettrasso, H.-S. Park, B. A. Remington, J. S. Ross, D. Ryu, D. Ryutov, T. G. White, B. Reville, F. Miniati, A. A. Schekochihin, D. Q. Lamb, D. H. Froula, and G. Gregori,  
“**Laboratory evidence of dynamo amplification of magnetic fields in a turbulent plasma,**”  
*Nature Comm.* **9**, 591 (2018) [e-print arXiv:1702.03016]

2017

115. I. Khabibullin, S. Komarov, E. M. Churazov, and A. A. Schekochihin,  
“**Polarization of Sunyaev-Zeldovich signal due to electron pressure anisotropy in galaxy clusters,**”  
*Mon. Not. R. Astron. Soc.* **474**, 2389 (2017) [e-print arXiv:1711.03084]
114. A. F. A. Bott, C. Graziani, P. Tzeferacos, T. G. White, D. Q. Lamb, G. Gregori, and A. A. Schekochihin,  
“**Proton imaging of stochastic magnetic fields,**”  
*J. Plasma Phys.* **83**, 905830614 (2017) [e-print arXiv:1708.01738]

113. A. Mallet, A. A. Schekochihin, and B. D. G. Chandran,  
**“Disruption of Alfvénic turbulence by magnetic reconnection in a collisionless plasma,”**  
*J. Plasma Phys.* **83**, 905830609 (2017) [e-print arXiv:1707.05907]
112. J. Squire, M. W. Kunz, E. Quataert, and A. A. Schekochihin,  
**“Kinetic simulations of the interruption of large-amplitude shear-Alfvén waves in a high-beta plasma,”**  
*Phys. Rev. Lett.* **119**, 155101 (2017) [e-print arXiv:1705.01956]
111. F. van Wyk, E. G. Highcock, A. R. Field, C. M. Roach, F. I. Parra, W. Dorland, and A. A. Schekochihin,  
**“Ion-scale turbulence in MAST: anomalous transport, subcritical transitions, and comparison to BES measurements,”**  
*Plasma Phys. Control. Fusion* **59**, 114003 (2017) [e-print arXiv:1704.02830]
110. P. Tzeferacos, A. Rigby, A. Bott, A. R. Bell, R. Bingham, A. Casner, F. Cattaneo, E. M. Churazov, J. Emig, N. Flocke, F. Fiuza, C. B. Forest, J. Foster, C. Graziani, J. Katz, M. Koenig, C.-K. Li, J. Meinecke, R. Petrasso, H.-S. Park, B. A. Remington, J. S. Ross, D. Ryu, D. Ryutov, K. Weide, T. G. White, B. Reville, F. Miniati, A. A. Schekochihin, D. H. Froula, G. Gregori, and D. Q. Lamb,  
**“Numerical modeling of laser-driven experiments aiming to demonstrate magnetic field amplification via turbulent dynamo,”**  
*Phys. Plasmas* **24**, 041404 (2017) [e-print arXiv:1702.03015]
109. J. Squire, A. A. Schekochihin, and E. Quataert,  
**“Amplitude limits and nonlinear damping of shear-Alfvén waves in high-beta low-collisionality plasmas,”**  
*New J. Phys.* **19**, 055005 (2017) [e-print arXiv:1701.03175]
108. A. Mallet, A. A. Schekochihin, and B. D. G. Chandran,  
**“Disruption of sheetlike structures in Alfvénic turbulence by magnetic reconnection,”**  
*Mon. Not. R. Astron. Soc.* **468**, 4862 (2017) [e-print arXiv:1612.07604]
107. M. F. J. Fox, F. van Wyk, A. R. Field, Y.-c. Ghim, F. I. Parra, A. A. Schekochihin, and the MAST Team,  
**“Symmetry breaking in MAST plasma turbulence due to toroidal flow shear,”**  
*Plasma Phys. Control. Fusion* **59**, 034002 (2017) [e-print arXiv:1609.08981]
106. M. F. J. Fox, A. R. Field, F. van Wyk, Y.-c. Ghim, A. A. Schekochihin, and the MAST Team,  
**“Experimental determination of the correlation properties of plasma turbulence using 2D BES systems,”**  
*Plasma Phys. Control. Fusion* **59**, 044008 (2017) [e-print arXiv:1609.09534]
105. F. Rincon, T. Roudier, A. A. Schekochihin, and M. Rieutord,  
**“Supergranulation and multiscale flows in the solar photosphere: global observations vs. a theory of anisotropic turbulent convection,”**  
*Astron. Astrophys.* **599**, A69 (2017) [e-print arXiv:1609.05785]
104. G. J. Colyer, A. A. Schekochihin, F. I. Parra, C. M. Roach, M. A. Barnes, Y.-c. Ghim, and W. Dorland,  
**“Collisionality scaling of the electron heat flux in ETG turbulence,”**  
*Plasma Phys. Control. Fusion* **59**, 055002 (2017) [e-print arXiv:1607.06752]
103. A. Mallet and A. A. Schekochihin,  
**“A model of three-dimensional anisotropy and intermittency in strong Alfvénic turbulence,”**  
*Mon. Not. R. Astron. Soc.* **466**, 3918 (2017) [e-print arXiv:1606.00466]
- 2016
102. F. van Wyk, E. G. Highcock, A. A. Schekochihin, C. M. Roach, A. R. Field, and W. Dorland,  
**“Transition to subcritical turbulence in a tokamak plasma,”**  
*J. Plasma Phys.* **82**, 905820609 (2016) [e-print arXiv:1607.08173]
101. P. Helander, M. Strumik, and A. A. Schekochihin,  
**“Constraints on dynamo action in plasmas,”**  
*J. Plasma Phys.* **82**, 905820601 (2016) [e-print arXiv:1607.06637]
100. C. H. K. Chen, L. Matteini, A. A. Schekochihin, M. L. Stevens, C. S. Salem, B. A. Maruca, M. W. Kunz, and S. D. Bale,  
**“Multi-species measurements of the firehose and mirror instability thresholds in the solar wind,”**  
*Astrophys. J.* **825**, L26 (2016) [e-print arXiv:1606.02624]

99. E. Churazov, P. Arévalo, W. Forman, C. Jones, A. Schekochihin, A. Vikhlinin, and I. Zhuravleva,  
**“Arithmetic with X-ray images of galaxy clusters: effective equation of state for small-scale perturbations in the ICM,”**  
*Mon. Not. R. Astron. Soc.* **463**, 1057 (2016) [e-print arXiv:1605.08999]
98. J. Squire, E. Quataert, and A. A. Schekochihin,  
**“A stringent limit on the amplitude of Alfvénic perturbations in high-beta low-collisionality plasmas,”**  
*Astrophys. J.* **830**, L25 (2016) [e-print arXiv:1605.02759]
97. S. V. Komarov, I. I. Khabibullin, E. M. Churazov, and A. A. Schekochihin,  
**“Polarization of thermal bremsstrahlung emission due to electron pressure anisotropy,”**  
*Mon. Not. R. Astron. Soc.* **461**, 2162 (2016) [e-print arXiv:1604.08669]
96. J. T. Parker, E. G. Highcock, A. A. Schekochihin, and P. J. Dellar,  
**“Suppression of phase mixing in drift-kinetic plasma turbulence,”**  
*Phys. Plasmas* **23**, 070703 (2016) [e-print arXiv:1603.06968]
95. S. V. Komarov, E. M. Churazov, M. W. Kunz and A. A. Schekochihin,  
**“Thermal conduction in a mirror-unstable plasma,”**  
*Mon. Not. R. Astron. Soc.* **460**, 467 (2016) [e-print arXiv:1603.00524]
94. I. Zhuravleva, E. Churazov, P. Arévalo, A. A. Schekochihin, W. R. Forman, S. W. Allen, A. Simionescu, R. Sunyaev, A. Vikhlinin, and N. Werner,  
**“The nature and energetics of AGN-driven perturbations in the hot gas in the Perseus cluster,”**  
*Mon. Not. R. Astron. Soc.* **458**, 2902 (2016) [e-print arXiv:1601.02615]
93. S. Melville, A. A. Schekochihin, and M. W. Kunz,  
**“Pressure-anisotropy-driven microturbulence and magnetic-field evolution in a shearing, collisionless plasma,”**  
*Mon. Not. R. Astron. Soc.* **459**, 2701 (2016) [e-print arXiv:1512.08131]
92. F. Rincon, F. Califano, A. A. Schekochihin, and F. Valentini,  
**“Turbulent dynamo in a collisionless plasma,”**  
*Proc. Nat. Acad. Sci.* **113**, 3950 (2016) [e-print arXiv:1512.06455]
91. A. Mallet, A. A. Schekochihin, B. D. G. Chandran, C. H. K. Chen, T. S. Horbury, R. T. Wicks, and C. C. Greenan,  
**“Measures of three-dimensional anisotropy and intermittency in strong Alfvénic turbulence,”**  
*Mon. Not. R. Astron. Soc.* **459**, 2130 (2016) [e-print arXiv:1512.01461]
90. A. A. Schekochihin, J. T. Parker, E. G. Highcock, P. J. Dellar, W. Dorland, and G. W. Hammett,  
**“Phase mixing vs. nonlinear advection in drift-kinetic plasma turbulence,”**  
*J. Plasma Phys.* **82**, 905820212 (2016) [e-print arXiv:1508.05988]

2015

89. C. R. Reynolds, S. A. Balbus, and A. A. Schekochihin,  
**“Inefficient driving of bulk turbulence by active galactic nuclei in a hydrodynamic model of the intracluster medium,”**  
*Astrophys. J.* **815**, 41 (2015) [e-print arXiv:1511.03271]
88. J. Meinecke, P. Tzeferacos, A. R. Bell, R. Bingham, E. M. Churazov, R. Crowston, H. Doyle, R. P. Drake, M. Koenig, Y. Kuramitsu, C. C. Kuranz, D. Lee, M. J. MacDonald, C. D. Murphy, H.-S. Park, A. Pelka, A. Ravasio, B. Reville, Y. Sakawa, W. C. Wan, N. C. Woolsey, R. Yurchak, F. Miniati, A. A. Schekochihin, D. Q. Lamb, G. Gregori,  
**“Developed turbulence and nonlinear amplification of magnetic fields in laboratory and astrophysical plasmas,”**  
*Proc. Nat. Acad. Sci.* **112**, 8211 (2015)
87. I. Zhuravleva, E. Churazov, P. Arévalo, A. A. Schekochihin, S. W. Allen, A. C. Fabian, W. R. Forman, J. S. Sanders, A. Simionescu, R. Sunyaev, A. Vikhlinin, N. Werner,  
**“Gas density fluctuations in the Perseus Cluster: clumping factor and velocity power spectrum,”**  
*Mon. Not. R. Astron. Soc.* **450**, 4184 (2015) [e-print arXiv:1501.07271]
86. M. W. Kunz, A. A. Schekochihin, C. H. K. Chen, I. G. Abel and S. C. Cowley,  
**“Inertial-range kinetic turbulence in pressure-anisotropic astrophysical plasmas,”**  
*J. Plasma Phys.* **81**, 325810501 (2015) [e-print arXiv:1501.06771]

85. F. Rincon, A. A. Schekochihin, and S. C. Cowley,  
**“Nonlinear mirror instability,”**  
*Mon. Not. R. Astron. Soc.* **447**, L45 (2015) [e-print arXiv:1407.4707]
84. A. Mallet, A. A. Schekochihin, and B. D. G. Chandran,  
**“Refined critical balance in strong Alfvénic turbulence,”**  
*Mon. Not. R. Astron. Soc.* **449**, L77 (2015) [e-print arXiv:1406.5658]
83. B. D. G. Chandran, A. A. Schekochihin, and A. Mallet,  
**“Intermittency and alignment in strong RMHD turbulence,”**  
*Astrophys. J.* **807**, 39 (2015) [e-print arXiv:1403.6354]
82. A. Kanekar, A. A. Schekochihin, W. Dorland and N. F. Loureiro,  
**“Fluctuation-dissipation relations for a plasma-kinetic Langevin equation,”**  
*J. Plasma Phys.* **81**, 305810104 (2015) [e-print arXiv:1403.6257]

2014

81. I. Zhuravleva, E. Churazov, A. A. Schekochihin, S. W. Allen, P. Arévalo, A. C. Fabian, W. R. Forman, J. S. Sanders, A. Simionescu, R. Sunyaev, A. Vikhlinin, and N. Werner,  
**“Turbulent heating in galaxy clusters brightest in X-rays,”**  
*Nature* **515**, 85 (2014) [e-print arXiv:1410.6485]
80. I. Zhuravleva, E. M. Churazov, A. A. Schekochihin, E. T. Lau, D. Nagai, M. Gaspari, S. W. Allen, K. Nelson, and I. J. Parrish,  
**“The relation between gas density and velocity power spectra in galaxy clusters: qualitative treatment and cosmological simulations,”**  
*Astrophys. J.* **788**, L13 (2014) [e-print arXiv:1404.5306]
79. M. W. Kunz, A. A. Schekochihin, and J. M. Stone,  
**“Firehose and mirror instabilities in a collisionless shearing plasma,”**  
*Phys. Rev. Lett.* **112**, 205003 (2014) [e-print arXiv:1402.0010]
78. J. Meinecke, H. Doyle, F. Miniati, A. R. Bell, R. Bingham, R. Crowston, R. P. Drake, M. Fatenejad, M. Koenig, Y. Kuramitsu, C. C. Kuranz, D. Q. Lamb, D. Lee, M. J. MacDonald, C. D. Murphy, H.-S. Park, A. Pelka, A. Ravasio, Y. Sakawa, A. A. Schekochihin, A. Scopatz, P. Tzeferacos, W. C. Wan, N. C. Woolsey, R. Yurchak, B. Reville, and G. Gregori,  
**“Turbulent amplification of magnetic fields in laboratory laser-produced shock waves,”**  
*Nature Phys.* **10**, 520 (2014)
77. F. Mogavero and A. A. Schekochihin,  
**“Models of magnetic-field evolution and effective viscosity in weakly collisional extragalactic plasmas,”**  
*Mon. Not. R. Astron. Soc.* **440**, 3226 (2014) [e-print arXiv:1312.3672]
76. A. R. Field, D. Dunai, Y.-c. Ghim, P. Hill, B. McMillan, C. M. Roach, S. Saarelma, A. A. Schekochihin, S. Zoletnik, and the MAST team,  
**“Comparison of BES measurements of ion-scale turbulence with nonlinear gyrokinetic simulations of MAST L-mode plasmas,”**  
*Plasma Phys. Control. Fusion* **56**, 025012 (2014) [e-print arXiv:1307.0081]
75. S. V. Komarov, E. M. Churazov, A. A. Schekochihin, and J. A. ZuHone,  
**“Suppression of local heat flux in a turbulent magnetized intracluster medium,”**  
*Mon. Not. R. Astron. Soc.* **440**, 1153 (2014) [e-print arXiv:1304.1857]
74. Y.-c. Ghim, A. R. Field, A. A. Schekochihin, E. G. Highcock, C. Michael, and the MAST Team,  
**“Local dependence of ion temperature gradient on magnetic configuration, rotational shear and turbulent heat flux in MAST,”**  
*Nucl. Fusion.* **54**, 042003 (2014) [e-print arXiv:1211.2883]

2013

73. R. T. Wicks, D. A. Roberts, A. Mallet, A. A. Schekochihin, T. S. Horbury, and C. H. K. Chen,  
**“Correlations at large scales and the onset of turbulence in the fast solar wind,”**  
*Astrophys. J.* **778**, 177 (2013) [e-print arXiv:1312.4585]  
 Erratum: *Astrophys. J.* **782**, 118 (2014)
72. J. S. Sanders, A. C. Fabian, E. Churazov, A. A. Schekochihin, A. Simionescu, S. Walker, and N. Werner,  
**“Linear structures in the core of the Coma cluster,”**  
*Science* **341**, 1365 (2013) [e-print arXiv:1309.4866]

71. E. Churazov, M. Ruszkowski, and A. Schekochihin,  
**“Powering of cool filaments in cluster cores by buoyant bubbles. I. Qualitative model,”**  
*Mon. Not. R. Astron. Soc.*, in press (2013) [e-print arXiv:1304.3168]
70. N. F. Loureiro, A. A. Schekochihin, and A. Zocco,  
**“Fast collisionless reconnection and electron heating in strongly magnetized plasmas,”**  
*Phys. Rev. Lett.* **111**, 025002 (2013) [e-print arXiv:1301.0338]
69. R. T. Wicks, A. Mallet, T. S. Horbury, C. H. K. Chen, A. A. Schekochihin, and J. J. Mitchell,  
**“Alignment and scaling of large-scale fluctuations in the solar wind,”**  
*Phys. Rev. Lett.* **110**, 025003 (2013) [e-print arXiv:1209.5362]
68. I. G. Abel, G. G. Plunk, E. Wang, M. Barnes, S. C. Cowley, W. Dorland, and A. A. Schekochihin,  
**“Multiscale gyrokinetics for rotating tokamak plasmas: Fluctuations, transport and energy flows,”**  
*Rep. Prog. Phys.* **76**, 116201 (2013) [e-print arXiv:1209.4782]
67. Y.-c. Ghim, A. A. Schekochihin, A. R. Field, I. G. Abel, M. Barnes, G. Colyer, S. C. Cowley, F. I. Parra, D. Dunai, S. Zoletnik, and the MAST Team,  
**“Experimental signatures of critically balanced turbulence in MAST,”**  
*Phys. Rev. Lett.* **110**, 145002 (2013) [e-print arXiv:1208.5970]
66. N. F. Loureiro, A. A. Schekochihin, and D. A. Uzdensky,  
**“Plasmoid and Kelvin-Helmholtz instabilities in Sweet-Parker current sheets,”**  
*Phys. Rev. E* **87**, 013102 (2013) [e-print arXiv:1208.0966]

2012

65. E. G. Highcock, A. A. Schekochihin, S. C. Cowley, M. Barnes, F. I. Parra, C. M. Roach, and W. Dorland,  
**“Zero-turbulence manifold in a toroidal plasma,”**  
*Phys. Rev. Lett.* **109**, 265001 (2012) [e-print arXiv:1203.6455]
64. Y.-c. Ghim, A. R. Field, D. Dunai, S. Zoletnik, L. Bardóczi, A. A. Schekochihin, and the MAST Team,  
**“Measurement and physical interpretation of the mean motion of turbulent density patterns detected by the Beam Emission Spectroscopy system on the Mega Amp Spherical Tokamak,”**  
*Plasma Phys. Control. Fusion* **54**, 095012 (2012) [e-print arXiv:1203.4373]
63. A. A. Schekochihin, E. G. Highcock, and S. C. Cowley,  
**“Subcritical fluctuations and suppression of turbulence in differentially rotating gyrokinetic plasmas,”**  
*Plasma Phys. Control. Fusion* **54**, 055011 (2012) [e-print arXiv:1111.4929]
62. A. A. Schekochihin, S. V. Nazarenko, and T. A. Yousef,  
**“Weak Alfvén-wave turbulence revisited,”**  
*Phys. Rev. E* **85**, 036406 (2012) [e-print arXiv:1110.6682]
61. C. H. K. Chen, A. Mallet, A. A. Schekochihin, T. S. Horbury, R. T. Wicks, and S. D. Bale,  
**“Three-dimensional structure of solar-wind turbulence,”**  
*Astrophys. J.* **758**, 120 (2012) [e-print arXiv:1109.2558]
60. F. I. Parra, M. F. F. Nave, A. A. Schekochihin, C. Giroud, J. S. de Grassie, J. H. F. Severo, P. de Vries, K.-D. Zastrow, and JET-EFDA Contributors,  
**“Scaling of spontaneous rotation with temperature and plasma current in tokamaks,”**  
*Phys. Rev. Lett.* **108**, 095001 (2012) [e-print arXiv:1108.6106]
59. E. Churazov, A. Vikhlinin, I. Zhuravleva, A. Schekochihin, I. Parrish, R. Sunyaev, W. Forman, H. Böhringer, and S. Randall,  
**“X-ray surface brightness and gas density fluctuations in the Coma cluster,”**  
*Mon. Not. R. Astron. Soc.* **421**, 1123 (2012) [e-print arXiv:1110.5875]
58. N. F. Loureiro, R. Samtaney, A. A. Schekochihin, and D. A. Uzdensky,  
**“Magnetic reconnection and stochastic plasmoid chains in high-Lundquist-number plasmas,”**  
*Phys. Plasmas* **19**, 042303 (2012) [e-print arXiv:1108.4040]

2011

57. T. Heinemann, J. C. McWilliams, and A. A. Schekochihin,  
**“Large-scale magnetic field generation by randomly forced shearing waves,”**  
*Phys. Rev. Lett.* **107**, 255004 (2011) [e-print arXiv:0810.2225]

56. E. G. Highcock, M. Barnes, F. I. Parra, A. A. Schekochihin, C. M. Roach, and S. C. Cowley,  
**“Transport bifurcation induced by sheared toroidal flow in tokamak plasmas,”**  
*Phys. Plasmas* **18**, 102304 (2011) [e-print arXiv:1105.5750]
55. A. Zocco and A. A. Schekochihin,  
**“Reduced fluid-kinetic equations for low-frequency dynamics, magnetic reconnection and electron heating in low-beta plasmas,”**  
*Phys. Plasmas* **18**, 102309 (2011) [e-print arXiv:1104.4622]
54. M. Barnes, F. I. Parra, and A. A. Schekochihin,  
**“Critically balanced ion temperature gradient turbulence in fusion plasmas,”**  
*Phys. Rev. Lett.* **107**, 115003 (2011) [e-print arXiv:1104.4514]
53. G. G. Howes, J. M. TenBarge, W. Dorland, E. Quataert, A. A. Schekochihin, R. Numata, and T. Tatsuno,  
**“Gyrokinetic simulations of solar wind turbulence from ion to electron scales,”**  
*Phys. Rev. Lett.* **107**, 035004 (2011) [e-print arXiv:1104.0877]
52. R. T. Wicks, T. S. Horbury, C. H. K. Chen, and A. A. Schekochihin,  
**“Anisotropy of imbalanced Alfvénic turbulence in fast solar wind,”**  
*Phys. Rev. Lett.* **106**, 045001 (2011) [e-print arXiv:1009.2427]
51. F. I. Parra, M. Barnes, E. G. Highcock, A. A. Schekochihin, and S. C. Cowley,  
**“Momentum injection in tokamak plasmas and transitions to reduced transport,”**  
*Phys. Rev. Lett.* **106**, 115004 (2011) [e-print arXiv:1009.0733]
50. C. H. K. Chen, A. Mallet, T. A. Yousef, A. A. Schekochihin, and T. S. Horbury,  
**“Anisotropy of Alfvénic turbulence in the solar wind and numerical simulations,”**  
*Mon. Not. R. Astron. Soc.* **415**, 3219 (2011) [e-print arXiv:1009.0662]
49. M. Barnes, F. I. Parra, E. G. Highcock, A. A. Schekochihin, S. C. Cowley, and C. M. Roach,  
**“Turbulent transport in tokamak plasmas with rotational shear,”**  
*Phys. Rev. Lett.* **106**, 175004 (2011) [e-print arXiv:1007.3390]
48. M. W. Kunz, A. A. Schekochihin, S. C. Cowley, J. J. Binney, and J. S. Sanders,  
**“A thermally stable heating mechanism for the intracluster medium: turbulence, magnetic fields and plasma instabilities,”**  
*Mon. Not. R. Astron. Soc.* **410**, 2446 (2011) [e-print arXiv:1003.2719]
47. M. S. Rosin, A. A. Schekochihin, F. Rincon, and S. C. Cowley,  
**“A nonlinear theory of the parallel firehose and gyrothermal instabilities in a weakly collisional plasma,”**  
*Mon. Not. R. Astron. Soc.* **413**, 7 (2011) [e-print arXiv:1002.4017]
46. S. V. Nazarenko and A. A. Schekochihin,  
**“Critical balance in magnetohydrodynamic, rotating and stratified turbulence: towards a universal scaling conjecture,”**  
*J. Fluid Mech.* **677**, 134 (2011) [e-print arXiv:0904.3488]

2010

45. D. A. Uzdensky, N. F. Loureiro, and A. A. Schekochihin,  
**“Fast magnetic reconnection in the plasmoid-dominated regime,”**  
*Phys. Rev. Lett.* **105**, 235002 (2010) [e-print arXiv:1008.3330]
44. E. G. Highcock, M. Barnes, A. A. Schekochihin, F. I. Parra, C. M. Roach, and S. C. Cowley,  
**“Transport bifurcation in a rotating tokamak plasma,”**  
*Phys. Rev. Lett.* **105**, 215003 (2010) [e-print arXiv:1008.2305]
43. T. Tatsuno, M. Barnes, S. C. Cowley, W. Dorland, G. G. Howes, R. Numata, G. G. Plunk, and A. A. Schekochihin,  
**“Gyrokinetic simulation of entropy cascade in two-dimensional electrostatic turbulence,”**  
*J. Plasma Fusion Res. SERIES* **9**, 509 (2010) [e-print arXiv:1003.3933]
42. C. H. K. Chen, T. S. Horbury, A. A. Schekochihin, R. T. Wicks, O. Alexandrova, and J. Mitchell,  
**“Anisotropy of solar wind turbulence in the dissipation range,”**  
*Phys. Rev. Lett.* **104**, 255002 (2010) [e-print arXiv:1002.2539]
41. R. T. Wicks, T. S. Horbury, C. H. K. Chen, and A. A. Schekochihin,  
**“Power and spectral index anisotropy of the entire inertial range of turbulence in the fast solar wind,”**  
*Mon. Not. R. Astron. Soc.* **407**, L31 (2010) [e-print arXiv:1002.2096]

40. A. A. Schekochihin, S. C. Cowley, F. Rincon, and M. S. Rosin,  
**“Magnetofluid dynamics of magnetized cosmic plasma: firehose and gyrothermal instabilities,”**  
*Mon. Not. R. Astron. Soc.* **405**, 291 (2010) [e-print arXiv:0912.1359]
39. C. H. K. Chen, R. T. Wicks, T. S. Horbury, and A. A. Schekochihin,  
**“Interpreting power anisotropy measurements in plasma turbulence,”**  
*Astrophys. J.* **711**, L79 (2010) [e-print arXiv:0909.2683]
38. G. G. Plunk, S. C. Cowley, A. A. Schekochihin, and T. Tatsuno,  
**“Two-dimensional gyrokinetic turbulence,”**  
*J. Fluid Mech.* **64**, 407 (2010) [e-print arXiv:0904.0243]

2009

37. C. M. Roach, I. G. Abel, R. J. Akers, W. Arter, M. Barnes, Y. Camenen, F. J. Casson, G. Colyer, J. W. Connor, S. C. Cowley, D. Dickinson, W. Dorland, A. R. Field, W. Guttenfelder, G. W. Hammett, R. J. Hastie, E. Highcock, N. F. Loureiro, A. G. Peeters, M. Reshko, S. Saarelma, A. A. Schekochihin, M. Valovic and H. R. Wilson,  
**“Gyrokinetic simulations of spherical tokamaks,”**  
*Plasma Phys. Control. Fusion* **51**, 124020 (2009)
36. N. F. Loureiro, D. A. Uzdensky, A. A. Schekochihin, S. C. Cowley, and T. A. Yousef,  
**“Turbulent magnetic reconnection in two dimensions,”**  
*Mon. Not. R. Astron. Soc.* **399**, L146 (2009) [e-print arXiv:0904.0823]
35. A. Waelkens, A. A. Schekochihin, and T. A. Enßlin,  
**“Probing magnetic turbulence by synchrotron polarimetry: statistics and structure of tangled magnetic fields from Stokes correlators,”**  
*Mon. Not. R. Astron. Soc.* **398**, 1970 (2009) [e-print arXiv:0903.3056]
34. R. Samtaney, N. F. Loureiro, D. A. Uzdensky, A. A. Schekochihin, and S. C. Cowley,  
**“Formation of plasmoid chains in magnetic reconnection,”**  
*Phys. Rev. Lett.* **103**, 105004 (2009) [e-print arXiv:0903.0542]
33. T. Tatsuno, W. Dorland, A. A. Schekochihin, G. G. Plunk, M. Barnes, S. C. Cowley, and G. G. Howes,  
**“Nonlinear phase mixing and phase-space cascade of entropy in gyrokinetic plasma turbulence,”**  
*Phys. Rev. Lett.* **103**, 015003 (2009) [e-print arXiv:0811.2538]
32. M. Barnes, I. G. Abel, W. Dorland, D. R. Ernst, G. W. Hammett, P. Ricci, B. N. Rogers, A. A. Schekochihin, and T. Tatsuno,  
**“Linearized model Fokker-Planck collision operators for gyrokinetic simulations. II. Numerical implementation and tests,”**  
*Phys. Plasmas* **16**, 072107 (2009) [e-print arXiv:0809.3945]
31. A. A. Schekochihin, S. C. Cowley, W. Dorland, G. W. Hammett, G. G. Howes, E. Quataert, and T. Tatsuno,  
**“Astrophysical gyrokinetics: kinetic and fluid turbulent cascades in magnetized weakly collisional plasmas,”**  
*Astrophys. J. Suppl.* **182**, 310 (2009) [e-print arXiv:0704.0044]

2008

30. I. G. Abel, M. Barnes, S. C. Cowley, W. Dorland, and A. A. Schekochihin,  
**“Linearized model Fokker-Planck collision operators for gyrokinetic simulations. I. Theory,”**  
*Phys. Plasmas* **15**, 122509 (2008) [e-print arXiv:0808.1300]
29. T. A. Yousef, T. Heinemann, F. Rincon, A. A. Schekochihin, N. Kleeorin, I. Rogachevskii, S. C. Cowley, and J. C. McWilliams,  
**“Numerical experiments on dynamo action in sheared and rotating turbulence,”**  
*Astron. Nachr.* **329**, 737 (2008) [e-print arXiv:0807.1122]
28. A. A. Schekochihin, S. C. Cowley, W. Dorland, G. W. Hammett, G. G. Howes, G. G. Plunk, E. Quataert, and T. Tatsuno,  
**“Gyrokinetic turbulence: a nonlinear route to dissipation through phase space,”**  
*Plasma Phys. Control. Fusion* **50**, 124024 (2008) [e-print arXiv:0806.1069]
27. G. G. Howes, W. Dorland, S. C. Cowley, G. W. Hammett, E. Quataert, A. A. Schekochihin, and T. Tatsuno,  
**“Kinetic simulations of magnetized turbulence in astrophysical plasmas,”**  
*Phys. Rev. Lett.* **100**, 065004 (2008) [e-print arXiv:0711.4355]



26. T. A. Yousef, T. Heinemann, A. A. Schekochihin, N. Kleeorin, I. Rogachevskii, A. B. Iskakov, S. C. Cowley, and J. C. McWilliams,  
**“Generation of magnetic field by combined action of turbulence and shear,”**  
*Phys. Rev. Lett.* **100**, 184501 (2008) [e-print arXiv:0710.3359]
25. A. A. Schekochihin, S. C. Cowley, R. M. Kulsrud, M. S. Rosin, and T. Heinemann,  
**“Nonlinear growth of firehose and mirror fluctuations in astrophysical plasmas,”**  
*Phys. Rev. Lett.* **100**, 081301 (2008) [e-print arXiv:0709.3828]
24. G. G. Howes, S. C. Cowley, W. Dorland, G. W. Hammett, E. Quataert, and A. A. Schekochihin,  
**“A model of turbulence in magnetized plasmas: implications for the dissipation range in the solar wind,”**  
*J. Geophys. Res.* **113**, A05103 (2008) [e-print arXiv:0707.3147]

2007

23. A. A. Schekochihin, A. B. Iskakov, S. C. Cowley, J. C. McWilliams, M. R. E. Proctor, and T. A. Yousef,  
**“Fluctuation dynamo and turbulent induction at low magnetic Prandtl numbers,”**  
*New J. Phys.* **9**, 300 (2007) [e-print arXiv:0704.2002]
22. N. F. Loureiro, A. A. Schekochihin, and S. C. Cowley,  
**“Instability of current sheets and formation of plasmoid chains,”**  
*Phys. Plasmas* **14**, 100703 (2007) [e-print astro-ph/0703631]
21. A. B. Iskakov, A. A. Schekochihin, S. C. Cowley, J. C. McWilliams, and M. R. E. Proctor,  
**“Numerical demonstration of fluctuation dynamo at low magnetic Prandtl numbers,”**  
*Phys. Rev. Lett.* **98**, 208501 (2007) [e-print astro-ph/0702291]
20. T. A. Yousef, F. Rincon, and A. A. Schekochihin,  
**“Exact scaling laws and the local structure of isotropic magnetohydrodynamic turbulence,”**  
*J. Fluid Mech.* **575**, 111 (2007) [e-print astro-ph/0611692]
19. A. A. Schekochihin, S. C. Cowley, and W. Dorland,  
**“Interplanetary and interstellar plasma turbulence,”**  
*Plasma Phys. Control. Fusion* **49**, A195 (2007) [e-print astro-ph/0610810]

2006

18. A. A. Schekochihin and S. C. Cowley,  
**“Turbulence, magnetic fields and plasma physics in clusters of galaxies,”**  
*Phys. Plasmas* **13**, 056501 (2006) [E-print astro-ph/0601246]
17. G. G. Howes, S. C. Cowley, W. Dorland, G. W. Hammett, E. Quataert, and A. A. Schekochihin,  
**“Astrophysical gyrokinetics: basic equations and linear theory,”**  
*Astrophys. J.* **651**, 590 (2006) [e-print astro-ph/0511812]
16. A. A. Schekochihin and S. C. Cowley,  
**“Fast growth of magnetic fields in galaxy clusters: a self-accelerating dynamo,”**  
*Astron. Nachr.* **327**, 599 (2006) [e-print astro-ph/0508535]

2005

15. N. F. Loureiro, S. C. Cowley, W. D. Dorland, M. G. Haines, and A. A. Schekochihin,  
**“X-point collapse and saturation in the nonlinear tearing-mode reconnection,”**  
*Phys. Rev. Lett.* **95**, 235003 (2005) [e-print physics/0507206]
14. C. M. Roach, D. J. Applegate, J. W. Connor, S. C. Cowley, W. D. Dorland, R. J. Hastie, N. Joiner, S. Saarelma, A. A. Schekochihin, R. J. Akers, C. Brickley, A. R. Field, M. Valovic, and the MAST Team,  
**“Microstability physics as illuminated in the spherical tokamak,”**  
*Plasma Phys. Control. Fusion* **47**, B323 (2005)
13. A. A. Schekochihin, S. C. Cowley, R. M. Kulsrud, G. W. Hammett, and P. Sharma,  
**“Plasma instabilities and magnetic-field growth in clusters of galaxies,”**  
*Astrophys. J.* **629**, 139 (2005) [E-print astro-ph/0501362]
12. A. A. Schekochihin, N. E. L. Haugen, A. Brandenburg, S. C. Cowley, J. L. Maron, and J. C. McWilliams,  
**“The onset of a small-scale turbulent dynamo at low magnetic Prandtl numbers,”**  
*Astrophys. J.* **625**, L115 (2005) [E-print astro-ph/0412594]

2004

11. A. A. Schekochihin, P. H. Haynes, and S. C. Cowley,  
**“Diffusion of passive scalar in a finite-scale random flow,”**  
*Phys. Rev. E* **70**, 046304 (2004) [e-print nlin.CD/0404016]
10. A. A. Schekochihin, S. C. Cowley, S. F. Taylor, J. L. Maron, and J. C. McWilliams,  
**“Simulations of the small-scale turbulent dynamo,”**  
*Astrophys. J.* **612**, 276 (2004) [E-print astro-ph/0312046]
9. A. A. Schekochihin, S. C. Cowley, J. L. Maron, and J. C. McWilliams,  
**“Critical magnetic Prandtl number for small-scale dynamo,”**  
*Phys. Rev. Lett.* **92**, 054502 (2004) [e-print astro-ph/0308336]
8. A. A. Schekochihin, S. C. Cowley, S. F. Taylor, G. W. Hammett, J. L. Maron, and J. C. McWilliams,  
**“Saturated state of the nonlinear small-scale dynamo,”**  
*Phys. Rev. Lett.* **92**, 084504 (2004) [e-print astro-ph/0308252]
7. A. A. Schekochihin, S. C. Cowley, J. L. Maron, and J. C. McWilliams,  
**“Self-similar turbulent dynamo,”**  
*Phys. Rev. Lett.* **92**, 064501 (2004) [e-print nlin.CD/0306059]

2002

6. A. A. Schekochihin, S. C. Cowley, G. W. Hammett, J. L. Maron, and J. C. McWilliams,  
**“A model of nonlinear evolution and saturation of the turbulent MHD dynamo,”**  
*New J. Phys.* **4**, 84 (2002) [e-print astro-ph/0207503]
5. A. A. Schekochihin, J. L. Maron, S. C. Cowley, and J. C. McWilliams,  
**“The small-scale structure of magnetohydrodynamic turbulence with large magnetic Prandtl numbers,”**  
*Astrophys. J.* **576**, 806 (2002) [e-print astro-ph/0203219]
4. A. Schekochihin, S. Cowley, J. Maron, and L. Malyshkin,  
**“Structure of small-scale magnetic fields in the kinematic dynamo theory,”**  
*Phys. Rev. E* **65**, 016305 (2002) [e-print astro-ph/0105322]
3. A. A. Schekochihin, S. A. Boldyrev, and R. M. Kulsrud,  
**“Spectra and growth rates of fluctuating magnetic fields in the kinematic dynamo theory with large magnetic Prandtl numbers,”**  
*Astrophys. J.* **567**, 828 (2002) [e-print astro-ph/0103333]

2001

2. A. A. Schekochihin and R. M. Kulsrud,  
**“Finite-correlation-time effects in the kinematic dynamo problem,”**  
*Phys. Plasmas* **8**, 4937 (2001) [e-print astro-ph/0002175]

2000

1. S. A. Boldyrev and A. A. Schekochihin,  
**“Geometric properties of passive random advection,”**  
*Phys. Rev. E* **62**, 545 (2000) [e-print chaos-dyn/9907034]

## BOOK REVIEWS, EDITORIALS

3. A. Shukurov, D. Sokoloff and A. Schekochihin,  
**“Special issue: Macroscopic randomness in astrophysical plasmas: The legacy and vision of Ya. B. Zeldovich,”**  
*J. Plasma Phys.* **81**, 391810403 (2015)
2. W. Dorland and A. Schekochihin,  
**“Editorial: The way forward for JPP,”**  
*J. Plasma Phys.* **80**, 131 (2014)
1. A. Schekochihin,  
**Review of *Plasma Physics for Astrophysics*, by R. M. Kulsrud (Princeton: Princeton University Press, 2004),**  
*J. Fluid Mech.* **544**, 378 (2005)

## CONFERENCE PROCEEDINGS and REPORTS (some refereed)

28. M. Oliver, T. White, P. Maybe M. Kühn-Kauffeldt, L. Döhl, R. Bingham, R. Clarke, P. Graham, R. Heathcote, M. Koenig, Y. Kuramitsu, D. Q. Lamb, J. Meinecke, T. Michel, F. Miniati, M. Notley, B. Reville, S. Sarkar, Y. Sakawa, A. A. Schekochihin, P. Tzeferacos, N. Woolsey, H.-S. Park, and G. Gregori,  
**“Magneto-optic probe measurements in low density-supersonic jets,”**  
*J. Inst.* **12**, P12001 (2017)
27. A. Kirk, J. Adamek, R. J. Akers, S. Allan, L. Appel, F. Arese Lucini, M. Barnes, T. Barrett, N. Ben Ayed, W. Boeglin, J. Bradley, P. K. Browning, J. Brunner, P. Cahyna, S. Cardnell, M. Carr, F. Casson, M. Cecconello, C. Challis, I. T. Chapman, S. Chapman, J. Chorley, S. Conroy, N. Conway, W. A. Cooper, M. Cox, N. Crocker, B. Crowley, G. Cunningham, A. Danilov, D. Darrow, R. Dendy, D. Dickinson, W. Dorland, B. Dudson, D. Dunai, L. Easy, S. Elmore, M. Evans, T. Farley, N. Fedorczak, A. Field, G. Fishpool, I. Fitzgerald, M. Fox, S. Freethy, L. Garzotti, Y.-c. Ghim, K. Gi, K. Gibson, M. Gorelenkova, W. Gracias, C. Gurl, W. Guttenfelder, C. Ham, J. Harrison, D. Harting, E. Havlickova, N. Hawkes, T. Hender, S. Henderson, E. Highcock, J. Hillesheim, B. Hnat, J. Horacek, J. Howard, D. Howell, B. Huang, K. Imada, M. Inomoto, R. Imazawa, O. Jones, K. Kadowaki, S. Kaye, D. Keeling, I. Klimek, M. Kocan, L. Kogan, M. Komm, W. Lai, J. Leddy, H. Leggate, J. Hollocombe, B. Lipschultz, S. Lisgo, Y. Q. Liu, B. Lloyd, B. Lomanowski, V. Lukin, I. Lupelli, G. Maddison, J. Madsen, J. Mailloux, R. Martin, G. McArdle, K. McClements, B. McMillan, A. Meakins, H. Meyer, C. Michael, F. Militello, J. Milnes, A. W. Morris, G. Motojima, D. Muir1, G. Naylor, A. Nielsen, M. O’Brien, T. O’Gorman, M. O’Mullane, J. Olsen, J. Omotani, Y. Ono, S. Pamela, L. Pangione, F. Parra, A. Patel, W. Peebles, R. Perez, S. Pinches, L. Piron, M. Price, M. Reinke, P. Ricci, F. Riva, C. Roach, M. Romanelli, D. Ryan, S. Saarelma, A. Saveliev, R. Scannell, A. Schekochihin, S. Sharapov, R. Sharples, V. Shevchenko, K. Shinohara, S. Silburn, J. Simpson, A. Stanier, J. Storrs, H. Summers, Y. Takase, P. Tamain, H. Tanabe, H. Tanaka, K. Tani, D. Taylor, D. Thomas, N. Thomas-Davies, A. Thornton, M. Turnyanskiy, M. Valovic, R. Vann, F. van Wyk, N. Walkden, T. Watanabe, H. Wilson, M. Wischmeier, T. Yamada, J. Young, S. Zoletnik and the MAST Team and the EUROfusion MST1 Team,  
**“Overview of recent physics results from MAST,”**  
*Nucl. Fusion* **57**, 102007 (2017) [e-print arXiv:1611.06047]
26. J. Meinecke, A. R. Bell, R. Bingham, R. Crowston, H. Doyle, R. P. Drake, M. Fatenejad, M. Koenig, Y. Kuramitsu, C. Kuranz, D. Q. Lamb, D. Lee, M. J. MacDonald, F. Miniati, C. D. Murphy, H.-S. Park, A. Pelka, A. Ravasio, B. Reville, Y. Sakawa, A. A. Schekochihin, A. Scopatz, P. Tzeferacos, W. C. Wan, N. C. Woolsey, and G. Gregori,  
**“Magnetic field characterisation in laser-produced plasmas,”**  
*Plasma Fus. Res. J.*, submitted (2015)
25. C. B. Forest, K. Flanagan, M. Brookhart, C. M. Cooper, M. Clark, V. Désangles, J. Egedal, D. Endrizzi, M. Miesch, I. V. Khalzov, H. Li, J. Milhone, M. Nornberg, J. Olson, E. Peterson, F. Roesler, A. Shekochihin, O. Schmitz, R. Siller, A. Spitkovsky, A. Stemo, J. Wallace, D. Weisberg and E. Zweibel,  
**“The Wisconsin Plasma Astrophysics Laboratory,”**  
*J. Plasma Phys.* **81**, 345810501 (2015) [e-print arXiv:1506.07195]
24. I. T. Chapman, J. Adamek, R. J. Akers, S. Allan, L. Appel, O. Asunta, M. Barnes, N. Ben Ayed, T. Bigelow, W. Boeglin, J. Bradley, J. Brünner, P. Cahyna, M. Carr, J. Caughman, M. Cecconello, C. Challis, S. Chapman, J. Chorley, G. Colyer, N. Conway, W.A. Cooper, M. Cox, N. Crocker, B. Crowley, G. Cunningham, A. Danilov, D. Darrow, R. Dendy, A. Diallo, D. Dickinson, S. Diem, W. Dorland, B. Dudson, D. Dunai, L. Easy, S. Elmore, A. Field, G. Fishpool, M. Fox, E. Fredrickson, S. Freethy, L. Garzotti, Y.-c. Ghim, K. Gibson, J. Graves, C. Gurl, W. Guttenfelder, C. Ham, J. Harrison, D. Harting, E. Havlíčková, J. Hawke, N. Hawkes, T. Hender, S. Henderson, E. Highcock, J. Hillesheim, B. Hnat, J. Holgate, J. Horáček, J. Howard, B. Huang, K. Imada, O. Jones, S. Kaye, D. Keeling, A. Kirk, I. Klimek, M. Kočan, H. Leggate, M. Lilley, B. Lipschultz, S. Lisgo, Y. Q. Liu, B. Lloyd, B. Lomanowski, I. Lupelli, G. Maddison, J. Mailloux, R. Martin, G. McArdle, K. McClements, B. McMillan, A. Meakins, H. Meyer, C. Michael, F. Militello, J. Milnes, A.W. Morris, G. Motojima, D. Muir1, E. Nardon, V. Naulin, G. Naylor, A. Nielsen, M. O’Brien, T. O’Gorman, Y. Ono, H. Oliver, S. Pamela, L. Pangione, F. Parra, A. Patel, W. Peebles, M. Peng, R. Perez, S. Pinches, L. Piron, M. Podesta, M. Price, M. Reinke, Y. Ren, C. Roach, J. Robinson, M. Romanelli, V. Rozhansky, S. Saarelma, S. Sangaroon, A. Saveliev, R. Scannell, A. Schekochihin, S. Sharapov, R. Sharples, V. Shevchenko, S. Silburn, J. Simpson, J. Storrs, Y. Takase, H. Tanabe, H. Tanaka, D. Taylor, G. Taylor, D. Thomas, N. Thomas-Davies, A. Thornton, M. Turnyanskiy, M. Valovič, R. Vann, N. Walkden, H. Wilson, L. F. van Wyk, T. Yamada, S. Zoletnik, and MAST and MAST Upgrade Teams,  
**“Overview of MAST results,”**  
*Nucl. Fusion* **55**, 104008 (2015)
23. A. R. Field, N. A. Crocker, D. Dunai, M. F. J. Fox, Y.-c. Ghim, E. G. Highcock, J. C. Hillesheim, F. I. Parra, W. A. Peebles, C. M. Roach, A. A. Schekochihin, L. F. van Wyk, and the MAST Team,  
**“Influence of flow shear on the structure of ion-scale turbulence in MAST,”**  
in Proc. 25th IAEA Fusion Energy Conference, St. Petersburg, 13-18 Oct. 2014, paper EX/P4-38

22. H. Meyer, I. G. Abel, R. J. Akers, A. Allan, S. Y. Allan, L. C. Appel, O. Asunta, M. Barnes, N. C. Barratt, N. Ben Ayed, J. W. Bradley, J. Canik, P. Cahyna, M. Cecconello, C. D. Challis, I. T. Chapman, D. Ciric, G. Colyer, N. J. Conway, M. Cox, B. J. Crowley, S. C. Cowley, G. Cunningham, A. Danilov, A. Darke, M. F. M. De Bock, G. De Temmerman, R. O. Dendy, P. Denner, D. Dickinson, A. Y. Dnestrovsky, Y. Dnestrovsky, M. D. Driscoll, B. Dudson, D. Dunai, M. Dunstan, P. Dura, S. Elmore, A. R. Field, G. Fishpool, S. Freethy, W. Fundamenski, L. Garzotti, Y. C. Ghim, K. J. Gibson, M. P. Gryaznevich, J. Harrison, E. Havlíčková, N. C. Hawkes, W. W. Heidbrink, T. C. Hender, E. Highcock, D. Higgins, P. Hill, B. Hnat, M. J. Hole, J. Horáček, D. F. Howell, K. Imada, O. Jones, E. Kaveeva, D. Keeling, A. Kirk, M. Kočan, R. J. Lake, M. Lehnen, H. J. Leggate, Y. Liang, M. K. Lilley, S. W. Lisgo, Y. Q. Liu, B. Lloyd, G. P. Maddison, J. Mailloux, R. Martin, G. J. McArdle, K. G. McClements, B. McMillan, C. Michael, F. Militello, P. Molchanov, S. Mordijck, T. Morgan, A. W. Morris, D. G. Muir, E. Nardon, V. Naulin, G. Naylor, A. H. Nielsen, M. R. O'Brien, T. O'Gorman, S. Pamela, F. I. Parra, A. Patel, S. D. Pinches, M. N. Price, C. M. Roach, J. R. Robinson, M. Romanelli, V. Rozhansky, S. Saarelma, S. Sangaroon, A. Saveliev, R. Scannell, J. Seidl, S. E. Sharapov, A. A. Schekochihin, V. Shevchenko, S. Shibaev, D. Stork, J. Storrs, A. Sykes, G. J. Tallents, P. Tamain, D. Taylor, D. Temple, N. Thomas-Davies, A. Thornton, M. R. Turnyanskiy, M. Valovič, R. G. L. Vann, E. Verwichte, P. Voskoboinikov, G. Voss, S. E. V. Warder, H. R. Wilson, I. Wodniak, S. Zoletnik, R. Zagórski and the MAST and NBI Teams, **“Overview of physics results from MAST towards ITER/DEMO and the MAST Upgrade,”** *Nucl. Fusion* **53**, 104008 (2013)
21. A. R. Field, G. Colyer, D. Dunai, Y.-c. Ghim, P. Hill, B. McMillan, C. Michael, C. M. Roach, S. Saarelma, A. A. Schekochihin, S. Zoletnik, and the MAST team, **“Characterisation of ion-scale turbulence in MAST,”** in Proc. 24th IAEA Fusion Energy Conference, San Diego, 8-13 Oct. 2012, paper EX/P7-01
20. A. Vaivads, G. Andersson, S. D. Bale, C. M. Cully, J. De Keyser, M. Fujimoto, S. Grahn, S. Haaland, H. Ji, Yu. V. Khotyaintsev, A. Lazarian, B. Lavraud, I. R. Mann, R. Nakamura, T. K. M. Nakamura, Y. Narita, A. Retinò, F. Sahraoui, A. Schekochihin, S. J. Schwartz, I. Shinohara, and L. Sorriso-Valvo, **“EIDOSCOPE: particle acceleration at plasma boundaries,”** *Exp. Astron.* **33**, 491 (2012)
19. M. Barnes, F. I. Parra, E. G. Highcock, A. A. Schekochihin, S. C. Cowley, and C. M. Roach, **“Shear flow suppression of turbulent transport and self-consistent profile evolution within a multi-scale gyrokinetic framework,”** in Proc. 23rd IAEA Fusion Energy Conference, Daejeon, 11-16 Oct. 2010, paper THC/P4-01
18. T. A. Enßlin, T. Clarke, C. Vogt, A. Waelkens, and A. A. Schekochihin, **“Magnetic turbulence in clusters of galaxies,”** in Proc. XXVII IAU General Assembly, Rio de Janeiro, 3-14 Aug. 2009, *Highlights Astron.* **15**, 456 (2010)
17. I. G. Abel, M. Barnes, S. C. Cowley, W. Dorland, G. W. Hammett, A. A. Schekochihin, and T. Tatsuno, **“Model collision operators for numerical gyrokinetics,”** in *Theory of Fusion Plasmas*, O. Sauter, X. Garbet, and E. Sindoni, Eds., Proc. Joint Varenna–Lausanne Intl. Workshop, Varenna, 25-29 Aug. 2008, *AIP Conf. Proc.* **1069**, 233 (2008)
16. T. A. Enßlin, T. Clarke, C. Vogt, A. Waelkens, and A. A. Schekochihin, **“Magnetic turbulence in clusters of galaxies,”** in *Magnetic Fields in the Universe II: From Laboratory and Stars to the Primordial Universe*, A. Esquivel, J. Franco, G. García-Segura, E. M. de Gouveia Dal Pino, A. Lazarian, and A. Raga, Eds., Proc. Intl. Conf., Cozumel, Mexico, 28 Jan.-1 Feb. 2008, *RevMexAA(SC)* **36**, 209 (2009)
15. G. G. Howes, S. C. Cowley, W. Dorland, G. W. Hammett, E. Quataert, and A. A. Schekochihin, **“Dissipation-scale turbulence in the solar wind,”** in *Turbulence and Nonlinear Processes in Astrophysical Plasmas*, D. Shaikh and G. P. Zank, Eds., Proc. 6th Ann. Intl. Astrophys. Conf., Oahu, Hawaii, 16-22 Mar. 2007, *AIP Conf. Proc.* **932**, 3 (2007) [E-print arXiv:0707.3149]
14. T. A. Yousef, F. Rincon, and A. A. Schekochihin, **“Exact scaling laws, nonlocality and structure in isotropic magnetohydrodynamic turbulence,”** in: *Advances in Turbulence XI*, J. M. L. M. Palma and A. Silva Lopes, Eds., Proc. 11th EUROMECH European Turbulence Conf., Porto, Portugal, 25-28 June 2007 (Berlin: Springer, 2007), 76
13. A. A. Schekochihin, S. C. Cowley, and T. A. Yousef, **“MHD turbulence: nonlocal, anisotropic, nonuniversal?”**

in: *Computational Physics and New Perspectives in Turbulence*, Proc. IUTAM Symposium, Nagoya, Japan, 11-14 Sept. 2006  
(Berlin: Springer, 2007), 339

12. A. A. Schekochihin and S. C. Cowley,  
“**Turbulence and magnetic fields in astrophysical plasmas,**”  
in: *Magnetohydrodynamics: Historical Evolution and Trends*, S. Molokov, R. Moreau, and H. K. Moffatt, Eds.  
(Berlin: Springer, 2007), 85 [e-print astro-ph/0507686]
11. N. F. Loureiro, S. C. Cowley, W. D. Dorland, G. W. Hammett, and A. A. Schekochihin,  
“**FLR effects in nonlinear tearing mode reconnection,**”  
Proc. 33rd EPS Conf. on Plasma Phys., Rome, Italy, 19-23 June 2006,  
*ECA 30I*, P-4.072 (2006)
10. T. A. Enßlin, A. Waelkens, C. Vogt, and A. A. Schekochihin,  
“**Future magnetic fields studies using the Planck surveyor experiment,**”  
in: *The Origin and Evolution of Cosmic Magnetism*, R. Beck, G. Brunetti, L. Feretti, and B. Gaensler, Eds.,  
Proc. Intl. Conf., Bologna 29 Aug.-1 Sept. 2005,  
*Astron. Nachr.* **327**, 626 (2006) [e-print astro-ph/0511488]
9. N. F. Loureiro, S. C. Cowley, W. D. Dorland, M. G. Haines, and A. A. Schekochihin,  
“**Nonlinear tearing mode reconnection,**”  
Proc. 32nd EPS Plasma Phys. Conf., Tarragona, Spain, 27 June-1 July 2005,  
*ECA 29C*, O-4.024 (2005)
8. A. A. Schekochihin, S. C. Cowley, R. M. Kulsrud, G. W. Hammett, and P. Sharma,  
“**Magnetised plasma turbulence in clusters of galaxies,**”  
in: *The Magnetized Plasma in Galaxy Evolution*, K. T. Chyzy, R.-J. Dettmar, K. Otmianowska-Mazur, and  
M. Soida, Eds., Proc. Intl. Conf., Jagiellonian University, Cracow, Poland, 27 Sept.-1 Oct. 2004,  
(Cracow: Jagiellonian University, 2005), 86 [e-print astro-ph/0411781]
7. N. F. Loureiro, S. C. Cowley, W. D. Dorland, M. G. Haines, and A. A. Schekochihin,  
“**Fast and slow nonlinear tearing mode reconnection,**”  
Proc. 31st EPS Conf. on Plasma Phys., London, UK, 28 June-2 July 2004,  
*ECA 28G*, P-4.208 (2004) [e-print physics/0407047]
6. A. A. Schekochihin, S. C. Cowley, S. F. Taylor, G. W. Hammett, J. L. Maron, and J. C. McWilliams,  
“**MHD turbulence and saturation of small-scale dynamo,**”  
Proc. 31st EPS Conf. on Plasma Phys., London, UK, 28 June-2 July 2004,  
*ECA 28G*, O-4.17 (2004)
5. N. F. Loureiro, S. C. Cowley, W. D. Dorland, M. G. Haines, and A. A. Schekochihin,  
“**Aspects of tearing mode physics,**”  
Proc. 30th EPS Conf. on Contr. Fusion and Plasma Phys., St. Petersburg, Russia, 7-11 July 2003,  
*ECA 27A*, P-3.96 (2003)
4. A. A. Schekochihin, S. C. Cowley, J. L. Maron, and J. C. McWilliams,  
“**The self-similar turbulent dynamo,**”  
Proc. 30th EPS Conf. on Contr. Fusion and Plasma Phys., St. Petersburg, Russia, 7-11 July 2003,  
*ECA 27A*, P-2.202 (2003)
3. A. A. Schekochihin, S. C. Cowley, S. F. Taylor, J. L. Maron, and J. C. McWilliams,  
“**From small-scale dynamo to isotropic MHD turbulence,**”  
in: *Magnetic Fields and Star Formation: Theory vs. Observations*, A. I. Gómez de Castro, M. Heyer, E. Vázquez-Semadeni, R. Rebolo, M. Tagger, and R. E. Pudritz, Eds., Proc. Intl. Workshop, Madrid, Spain, 21-25  
Apr. 2003,  
*Astrophys. Space Sci.* **292**, 141 (2004) [e-print astro-ph/0306296]
2. A. A. Schekochihin, S. C. Cowley, G. W. Hammett, J. L. Maron, and J. C. McWilliams,  
“**The nonlinear small-scale dynamo and isotropic MHD turbulence,**”  
Proc. 29th EPS Conf. on Plasma Phys. and Contr. Fusion, Montreux, Switzerland, 17-21 June 2002,  
*ECA 26B*, P-4.035 (2002) [e-print astro-ph/0207151]
1. A. Schekochihin, J. Maron, S. Cowley, and J. C. McWilliams,  
“**Structure of MHD turbulence in large-Prandtl-number plasmas,**”  
in: *Advances in Turbulence IX*, I. P. Castro, P. E. Hancock, and T. G. Thomas, Eds., Proc. 9th European  
Turbulence Conf., Southampton, UK, 2-5 July 2002  
(Barcelona: CIMNE, 2002), 785

## SEMINARS/COLLOQUIA

76. Science Society, Eton College, 22 Jan. 2019
75. *Theory Seminar*, Princeton Plasma Physics Laboratory, 4 Apr. 2018
74. *Student Seminar*, UKAEA, 16 Mar. 2018
73. *Plasma Seminar*, EPFL, 26 Feb. 2018
72. Cambridge University Physics Society, 31 Jan. 2018
71. *Science Meeting*, UKAEA, 12 Jan. 2018
70. *PSFC Seminar*, MIT, 13 Apr. 2017
69. *JCBA Colloquium*, University of Manchester, 22 Mar. 2017
68. Oxford University Physics Society, 19 Jan. 2017
67. *Space Physics Seminar*, Imperial College, London, 21 June 2016
66. *Applied Mathematics Seminar*, University of East Anglia, Norwich, 18 Apr. 2016
65. *Applied Mathematics Seminar*, Newcastle University, 15 Apr. 2016
64. *MIPSE Seminar*, University of Michigan, Ann Arbor, 23 Mar. 2016
63. Department of Physics, University of Pisa, 27 Apr. 2015
62. *NBIA-Oxford Theory Colloquium*, Copenhagen, 14 Apr. 2015
61. York Plasma Institute, University of York, 27 Feb. 2015
60. *Holography Seminar*, University of Oxford, 26 Jan. 2015
59. *Geophysical and Nonlinear Fluid Dynamics Seminar*, University of Oxford, 20 Jan. 2015
58. *Theory & Modeling Group Seminar*, IPFN, Instituto Superior Técnico, Lisbon, 12 Sept. 2014
57. *Saturday Mornings of Theoretical Physics*, University of Oxford, 10 May 2014
56. Oxford University Physics Society, 16 May 2013
55. Balliol Undergraduate Research Physics Society, 29 Apr. 2013
54. Aerospace Engineering Department, Universidad Politécnica de Madrid, 27 June 2012
53. *Applied Mathematics Seminar*, University of Newcastle upon Tyne, 4 May 2012
52. *Astronomy and Astrophysics Seminar*, University of Glasgow, 3 May 2012
51. *IPP Colloquium*, Max Planck Institute for Plasma Physics, Greifswald, 20 Apr. 2012
50. *34th UK Fusion Theory Seminar*, Culham Centre for Fusion Energy, 12 Apr. 2012
49. Space Sciences Laboratory, University of California, Berkeley, 24 Sept. 2011
48. *Astrophysical Fluid Dynamics Seminar*, DAMTP, University of Cambridge, 23 May 2011
47. *Astrophysics Theory Seminar*, University of Oxford, 8 Mar. 2011
46. Instituto de Plasmas e Fusão Nuclear, Instituto Superior Técnico, Lisbon 28 Feb. 2011
45. *Astrophysics Theory Seminar*, University of Oxford, 19 Oct. 2010
44. *Munich Joint Astronomy Colloquium*, European Southern Observatory, Garching, 30 Sept. 2010
43. *Feynmann Society Lecture*, Charterhouse School, Godalming, Surrey, 16 Sept. 2010
42. Isaac Newton Institute for Mathematical Sciences, Cambridge, 11 Aug. 2010
41. *Astrophysics Colloquium*, University of Oxford, 17 Nov. 2009
40. Physique Statistique et des Plasmas, Université Libre de Bruxelles, 15 Apr. 2009
39. Institute for Geophysics and Meteorology, University of Cologne, 14 Apr. 2009
38. *Theoretical Physics Colloquium*, University of Oxford, 6 Feb. 2009
37. Oxford University Space and Astronomical Society, 2 Feb. 2009
36. Department of Physics, University of Oxford, 30 May 2008
35. *Séminaire du LESIA*, Observatoire de Paris, Meudon, 14 June 2007
34. *Astrophysical Fluid Dynamics Seminar*, DAMTP, University of Cambridge, 22 May 2007
33. *Colloquium*, Institute of Astronomy, Cambridge, 3 May 2007
32. *Applied Mathematics Seminar*, University of Newcastle-upon-Tyne, 27 Apr. 2007
31. *Space Physics Seminar*, Imperial College London, 27 Feb. 2007
30. *Theoretical Mechanics Seminar*, University of Nottingham, 14 Feb. 2007
29. *Turbulence Seminar*, Institute for Mathematical Sciences, Imperial College London, 21 Sept. 2006
28. Plasma Physics Group, Dept. of Physics, Imperial College London, 24 July 2006
27. *Fusion, Space and Astrophysics Seminar*, University of Warwick, 12 June 2006
26. Dept. of Mechanical Engineering, Ben-Gurion University of the Negev, Beer-Sheva, Israel, 9 Apr. 2006
25. Institute of Astronomy, University of Cambridge, 1 Mar. 2006
24. *Applied Mathematics Seminar*, Imperial College London, 10 Feb. 2006
23. *Plasma Physics Seminar*, UCLA, 20 Jan. 2006
22. *Plasma Physics Seminar*, University of California, San Diego, 18 Jan. 2006
21. *Astrophysical Fluid Dynamics Seminar*, DAMTP, University of Cambridge, 22 Nov. 2005
20. *High Energy Astronomy Seminar*, Max-Planck-Institut für Astrophysik, Garching, 24 June 2005
19. *Science Colloquium*, Wolfson College, Cambridge, 13 June 2005
18. Laboratoire de Physique Statistique, École Normale Supérieure, Paris, 1 June 2005
17. *Séminaire d'Astrophysique*, Observatoire Midi-Pyrénées/Université Paul Sabatier, Toulouse, 26 May 2005
16. Equipe Dynamique des Systèmes Complexes, Université de Provence, Marseille, 23 May 2005
15. *Plasma Physics Seminar*, University of Maryland, College Park, 14 Apr. 2005

14. *General Physics Seminar*, École Normale Supérieure de Lyon, 21 March 2005
13. *Astrophysical Fluid Dynamics Seminar*, DAMTP, University of Cambridge, 1 March 2005
12. *Astrophysics Seminar*, American Museum of Natural History, New York City, 29 Oct. 2004
11. *Fusion Theory Colloquium*, UKAEA Culham Science Centre, 16 June 2004
10. *Astronomy Seminar*, Queen Mary, University of London, 30 Apr. 2004
9. *Departmental Fluid Mechanics Seminar*, DAMTP, University of Cambridge, 6 Feb. 2004
8. *Astrophysical Fluid Dynamics Seminar*, DAMTP, University of Cambridge, 27 Jan. 2004
7. *NORDITA*, Copenhagen, 5 Dec. 2003
6. *Applied Mathematics Seminar*, University College London, 9 Dec. 2002
5. *Plasma Physics Seminar*, Imperial College London, 19 Feb. 2002
4. *Plasma Theory Talk*, Imperial College London, 12 Feb. 2002
3. *Theory Seminar*, Princeton Plasma Physics Laboratory, 31 May 2001
2. *Astrophysics Seminar*, Princeton University, 25 May 2001
1. *Magneto-Fluid Dynamics Seminar*, Courant Institute of Mathematical Sciences, New York University, Jan. 2000

## CONFERENCES/WORKSHOPS/SCHOOLS

- Scientific Advisor**, *Multiscale Phenomena in Plasma Astrophysics*, KITP, Santa Barbara, 12 Aug.–18 Oct. 2019
- 80. Invited Lectures (3)**, *The Multiple Approaches to Plasma Physics: from Laboratory to Astrophysics*, École de Physique des Houches, France, 13–24 May 2019
- 79. Keynote Review**, *International Conference on High-Energy-Density Science*, Oxford, 1–5 Apr. 2019
- Responsible Organiser**, *11th Plasma Kinetics Working Group Meeting*, W. Pauli Institute, Vienna, 23 July–3 Aug. 2018
- 78. Invited Talk**, *Planets, Stars and Discs: A Golden Age for Particle and Gas Dynamics*, Oxford, 9–13 July 2018
- 77. Invited Talk**, *Max Planck–Princeton Research Center for Plasma Physics Meeting*, Greifswald, Germany, 19–22 Sept 2017
- Responsible Organiser**, *10th Plasma Kinetics Working Group Meeting*, W. Pauli Institute, Vienna, 17–28 July 2017
- Responsible Organiser**, *1st JPP Frontiers in Plasma Physics Conference*, Abbazia di Spineto, Tuscany, 24–26 May 2017
- 76. Invited Lecture**, *From Laboratories to Astrophysics: The Expanding Universe of Plasma Physics*, École de Physique des Houches, France, 2–12 May 2016
- 75. Solicited Talk**, *2nd THOR Workshop*, Barcelona, 27–29 Sept. 2016
- 74. Invited Talk**, *Magnetisation of Interstellar and Intergalactic Media: The Prospects of Low-Frequency Radio Observations*, Berlin, 26–30 Sept. 2016
- Responsible Organiser**, *9th Plasma Kinetics Working Group Meeting*, W. Pauli Institute, Vienna, 24 July–6 Aug. 2016
- 73. Invited Talk**, *Simulations and Modelling of Relativistic MHD Accretion Discs*, Oxford, 10–15 July 2016
- 72. Invited Talk**, *Vlasovia-2016: 5th International Workshop on the Theory and Applications of Vlasov Equation*, Copanello, Calabria, Italy, 30 May–2 June 2016
- 71. Invited Talk**, *Nathaniel J. Fisch Symposium: Solved and Unsolved Problems in Plasma Physics*, Princeton University, 28–30 Mar. 2016
- 70. Invited Talk**, *16th European Fusion Theory Conference*, Lisbon, 5–8 Oct. 2015
- 69. Member of SOC/Invited Talk**, *Turbulence and Dissipation in Collisionless Astrophysical Plasmas*, IESC, Cargèse, Corsica, 21–26 Sept. 2015
- Responsible Organiser**, *8th Plasma Kinetics Working Group Meeting*, W. Pauli Institute, Vienna, 20 July–2 Aug. 2015
- 68. Invited Talk**, *ICM Physics and Modelling*, MPA, Garching, 15–17 June 2015
- 67. Invited Lectures (3)**, *School on Geodynamo*, ICTS, Bangalore, 1–5 June 2015
- 66. Plenary Talk**, *International Sherwood Fusion Theory Conference*, NYU, 16–18 Mar. 2015
- Member of the Scientific Organising Committee**, *Snowcluster 2015: The Art of Galaxy Cluster Mass Measurement*, Snowbird, Utah, 15–20 Mar. 2015
- Invited Participant**, *Anisotropy and Intermittency in Solar Wind Turbulence*, ISSI, Bern, 5–9 Jan. 2015
- 65. Invited Talk**, *High-Energy Astrophysics Today and Tomorrow*, IKI, Moscow, 22–25 Dec. 2014
- Invited Participant**, *2nd IPP EUROfusion Workshop*, IST, Lisbon, 15–17 Sept. 2014
- 64. Invited Talk**, *3rd Intracluster Medium Theory and Computation Workshop*, The Niels Bohr Academy, Copenhagen, 11–14 Aug 2014
- 63. Invited Talk**, *Inhomogeneities in Intracluster Plasma*, KIPAC, Stanford University, 28–30 July 2014
- 62. Invited Talk**, *From the MRI to the Sun: 60th Anniversary of Steve Balbus*, Chamonix, France, 14–18 July 2014
- 61. Invited Talk**, *41st EPS Conference on Plasma Physics*, Berlin, 23–27 June 2014
- Invited Participant**, *1st IPP EUROfusion Workshop*, IPP, Garching, 14–16 Apr. 2014
- Responsible Organiser**, *7th (Astro)Plasma Kinetics Working Group Meeting*, W. Pauli Institute, Vienna, 24 Mar.–6 Apr. 2014

60. **Invited Talk**, *Workshop on Nonlocality in Turbulence*, W. Pauli Institute, Vienna, 2–5 Dec. 2013
59. **Invited Talk**, *Vlasovia-2013: International Workshop on the Theory and Applications of Vlasov Equation*, Nancy, France, 25–28 Nov. 2013
58. **Member of the Programme Committee/Invited Talk**, *Stability, Energetics, and Turbulent Transport in Astrophysical, Fusion, and Solar Plasmas*, PCTS, Princeton, 8–12 Apr. 2013
- Responsible Organiser**, *6th Gyrokinetics Working Group Meeting*, W. Pauli Institute, Vienna, 18–29 Mar. 2013
57. **Invited Lecture**, *The Future of Plasma Astrophysics*, École de Physique des Houches, 25 Feb.–8 Mar 2013
56. **Invited Talk**, *CMSO Workshop on Future Directions for Dynamo Research*, Madison, Wisconsin, 19–21 Dec. 2012
55. **Invited Talk**, *Tangled Magnetic Fields in Astro- and Plasma Physics*, ICMS, Edinburgh, 15–18 Oct 2012
54. **Invited Talk**, *Gyrokinetic Theory Working Group Meeting*, CIEMAT, Madrid, 18–29 June 2012
53. **Invited Lectures (3)**, *1st European School on Fundamental Processes in Space Weather*, Spineto, Tuscany, 4–9 June 2012
- Responsible Organiser**, *Gyrokinetics for ITER-3*, W. Pauli Institute, Vienna, 19–30 Mar. 2012
52. **Plenary Talk**, *Dynamo iGDR Meeting*, IES, Cargese, Corsica, 12–17 Sept. 2011
51. **Member of the International Advisory Committee/Invited Talk**, *International Astrophysics Forum*, Alpbach, Tirol, Austria, 20–24 June 2011
50. **Invited Talk**, *April Meeting of the APS*, Anaheim, CA, 2 May 2011
49. **Invited Talk**, *478th Heraeus Seminar: Fusion and Astrophysical Plasmas*, Bad Honnef, Germany, 18–20 Apr. 2011
- Responsible Organiser**, *Gyrokinetics for ITER-2*, W. Pauli Institute, Vienna, 3–17 Apr. 2011
48. **Invited Talk**, *Vlasov-Maxwell Kinetics: Theory, Simulations and Observations in Space Plasmas*, W. Pauli Institute, Vienna, 29 March–1 Apr. 2011
47. **Invited Talk**, *Monsters, Inc.: Astrophysics and Cosmology with Galaxy Clusters*, KITP, Santa Barbara, CA, 14–18 Mar. 2011
46. **Invited Talk**, *Non-thermal Phenomena in Colliding Galaxy Clusters*, Nice, 15–18 Nov. 2010
45. **Invited Talk**, *The Physics of Intracluster Medium: Theory and Computation*, Univ. of Michigan, Ann Arbor, 23–25 Aug. 2010
- Principal Organiser**, *Gyrokinetics in Laboratory and Astrophysical Plasmas*, I. Newton Institute, Cambridge, UK, 19 Jul.–13 Aug. 2010
44. **Invited Talk**, *Workshop on Self-Organization in Turbulent Plasmas and Fluids*, Dresden, 10–14 May 2010
- Responsible Organiser**, *Gyrokinetics for ITER*, W. Pauli Institute, Vienna, 15–26 Mar. 2010
43. **Invited Talk**, *Large-Scale Magnetic Fields in the Universe*, ISSI, Bern, 3 Mar. 2010
42. **Invited Talk**, *Multiscale Physics in Coronal Heating and Solar Wind Acceleration*, ISSI, Bern, 28 Jan. 2010
- Member of the Organising Committee**, *6th Winter School on Plasma Physics “Shear Flows and Momentum Transport in Laboratory and Astrophysical Plasmas,”* CMPD/CMSO, UCLA, 4–9 Jan. 2010
- Member of the Scientific Organising Committee**, *Conference on Natural Dynamos*, Stara Lesna, Slovakia, 30 Aug.–5 Sept. 2009
41. **Keynote Lecture**, *Plasmas, Computation and Mathematics*, Ambleside, UK, 19 July 2009
40. **Invited Talk**, *12th International Solar Wind Conference*, Saint-Malo, France, 22 June 2009
39. **Invited Lectures (2)**, *School on Astrophysical Turbulence and Dynamos*, ICTP, Trieste, Italy, 30 Apr. 2009
- Member of the Scientific Committee**, *Plasma Instabilities and Turbulence in Fusion Plasmas*, IOP Meeting on Plasma Physics, Univ. of Warwick, UK, 2–3 Apr. 2009
38. **Invited Lectures (4)**, *Frontiers in Dynamo Theory*, Institut H. Poincaré, Paris, 15 Mar.–10 Apr. 2009
- Responsible Organiser**, *Kinetic instabilities, plasma turbulence and magnetic reconnection*, W. Pauli Institute, Vienna, 16–20 Feb. 2009
37. **Invited Lectures (2)**, *5th Winter School on Plasma Physics “Common Themes in Space, Astrophysical and Laboratory Plasmas: Dynamo, Heat Transport and Collisionless Shocks,”* CMPD/CMSO, UCLA, 5–6 Jan. 2009
- Co-organiser**, *Structures and Waves in Anisotropic Turbulence*, I. Newton Institute Satellite Meeting, Univ. of Warwick, UK, 3–7 Nov. 2008
36. **Invited Review**, *Kinetic Modeling of Astrophysical Plasmas*, Cracow, Poland, 9 Oct. 2008
35. **Invited Talk**, *Inertial-Range Dynamics and Mixing*, I. Newton Institute, Cambridge, UK, 1 Oct. 2008
- EuroMHD Meeting*, Nice, 24 Sept. 2008
- Responsible Organiser**, *Workshop and Minicourse on Kinetic Equations, Numerical Approaches and Fluid Models for Plasma Turbulence*, W. Pauli Institute, Vienna, 15–19 Sept. 2008
34. **Invited Talk**, *Theory of Fusion Plasmas*, Villa Monastero, Varenna, Italy, 25–29 Aug. 2008
33. **Invited Talk**, *CMSO General Meeting Dedicated to R. M. Kulsrud’s 80th Birthday*, Princeton, NJ, 8 July 2008
32. **Invited Talk**, *Saturation and Transport Properties of MRI-driven Turbulence*, IAS, Princeton, NJ, 17 June 2008
31. **Invited Talk**, *35th EPS Conference on Plasma Physics*, Hersonissos, Crete, Greece, 10 June 2008
30. **Member of the Programme Committee/Invited Talk**, *7th International Workshop on Nonlinear Waves and Turbulence in Space Plasmas*, Beaulieu, France, 24 Apr. 2008
29. **Invited Talk**, *1st NILES International Workshop on Lasers and Plasmas and 10th Easter Plasma Meeting*, Cairo, Egypt, 17 March 2008
- Co-organiser**, *Workshop and Minicourse on Conceptual Aspects of Turbulence: Mean Fields vs. Fluctuations*,



W. Pauli Institute, Vienna, 11–15 Feb. 2008

- 28. Invited Lecture**, *4th Winter School on Plasma Physics “Instabilities in Plasmas,”* CMPD/CMSO, UCLA, 10 Jan. 2008
- 27. Invited Talk**, *High-Energy Astrophysics Today and Tomorrow*, IKI, Moscow, 24 Dec. 2007
- 26. Invited Talk**, *Réunion du GdR Dynamo*, Institut H. Poincaré, Paris, 13 Nov. 2007
- Co-organiser**, *Workshop and Minicourse on Conceptual Aspects of Turbulence: Weak vs. Strong*, W. Pauli Institute, Vienna, 10–12 Oct. 2007
- MHD Laboratory Experiments for Geophysics and Astrophysics*, Catania, Sicily, 2 Oct. 2007
- Space Plasmas and Astrophysics*, Observatoire de Paris, Meudon, France, 13 Sep. 2007
- 25. Invited Lectures (3)**, *Session LXXXVIII: Dynamos*, École de Physique des Houches, France, 20, 22, 23 Aug. 2007
- 24. Invited Talk**, *4<sup>me</sup> Festival de Théorie*, Aix-en-Provence, France, 12 July 2005
- 23. Invited Course** (5 lectures on Turbulence), *2nd International Conference (School) on Advanced Computing and Simulation*, DAMTP, Univ. of Cambridge, 25–29 June 2007
- Stars, Disks, and Planets: The Many Worlds of John Papaloizou*, Paris, 11–13 June 2007
- 22. Solicited Talk**, *EGU General Assembly 2007*, Vienna, 20 Apr. 2007
- 21. Invited Talk**, *Colloquium on Collisionless Plasmas*, Univ. de Nice Sophia Antipolis, France, 19 Feb. 2007
- 20. Invited Talk**, *Julius Hartmann Meeting*, Coventry Univ., 15 Feb. 2007
- 19. Invited Talk**, *Conceptual Aspects of Strongly Anisotropic Turbulence*, W. Pauli Institute, Vienna, 7 Feb. 2007
- 18. Invited Talk**, *Experimental Dynamo Meeting, Ampère Initiative*, Institut H. Poincaré, Paris, 23 Jan. 2007
- 17. Invited Lectures (2)**, *3rd Winter School on Plasma Physics “Plasma Turbulence and Transport: Commonalities between Laboratory, Space and Astrophysics,”* CMPD/CMSO, UCLA, 12 and 13 Jan. 2007
- 16. Invited Talk**, *Grand Challenge Problems in Computational Astrophysics: Reunion Conference I*, IPAM, UCLA, Lake Arrowhead, CA, 12 Dec. 2006
- 15. Invited Talk**, *Mini-Workshop on Intrcluster Medium*, MPA, Garching, 16 Nov. 2006
- Réunion du GdR Dynamo/GdR Turbulence*, Nice, France, 8 Nov. 2006
- 14. Invited Review**, *Conceptual Aspects of Hydrodynamic Stability*, W. Pauli Institute, Vienna, 10 Oct. 2006
- IUTAM Symposium on Computational Physics and New Perspectives in Turbulence*, Nagoya, Japan, 13 Sept. 2006
- Turbulence in the Magnetized Interstellar Medium*, Perm, Russia, 7 Sept. 2006
- 13. Invited Lecture**, *Instabilities and Turbulence in MHD Flows*, Univ. of Warwick, UK, 28 June 2006
- 12. Invited Review**, *13th International Congress on Plasma Physics*, Kiev, Ukraine, 23 May 2006
- 11. Invited Lecture**, *2nd Winter School on Plasma Physics “Physics of Magnetic Reconnection,”* CMPD/CMSO, UCLA, 11 Jan. 2006
- 10. Invited Talk**, *47th Annual Meeting of the APS Division of Plasma Physics*, Denver, CO, 27 Oct. 2005
- The Origin and Evolution of Cosmic Magnetism*, Bologna, Italy, 1 Sept. 2005
- 9. Invited Talk**, *3<sup>me</sup> Festival de Théorie*, Aix-en-Provence, France, 21 July 2005
- 8. Invited Talk**, *Oxbridge Applied Mathematics Meeting*, Univ. of Cambridge, 16 June 2005
- 7. Invited Talk**, *Réunion du GdR Dynamo*, ENS, Paris, 30 May 2005
- 6. Invited Talk**, *5th LMS Meeting on Mixing and Its Applications*, Univ. of Cambridge, 20 Apr. 2005
- Astrophysical Fluid Dynamics*, IPAM, UCLA, 4–9 Apr. 2005
- 5. Invited Lecture**, *1st Winter School on Plasma Physics*, CMPD, UCLA, 6 Jan. 2005
- Solar and Stellar Dynamoes*, I. Newton Institute Satellite Meeting, Univ. of Leeds, UK, 14 Dec. 2004
- 4. Invited Talk**, *Turbulence Day*, I. Newton Institute, Cambridge, UK, 7 Dec. 2004
- 46th Annual Meeting of the APS Division of Plasma Physics*, Savannah, GA, 15–19 Nov. 2004
- 3. Invited Talk**, *Numerical Methods for Plasma Astrophysics: From Particle Kinetics to MHD*, PICSciE, Princeton Univ., 26 Oct. 2004
- Large-Scale Computation in Astrophysics*, I. Newton Institute, Cambridge, UK, 13 Oct. 2004
- Magnetized Plasma in Galaxy Evolution*, Jagiellonian Univ., Cracow, Poland, 27 Sept. 2004
- Magnetohydrodynamics of Stellar Interiors*, I. Newton Institute, Cambridge, UK, 15 Sept. 2004
- 31st EPS Conference on Plasma Physics*, London, 1 July 2004
- 26th UK MHD Meeting*, Nice, France, 6 May 2004
- 3rd LMS Meeting on Astrophysical and Geophysical Fluid Mechanics*, Univ. of Exeter, UK, 16 Dec. 2003
- 2. Invited Talk**, *UKAFF2: Computational Fluid Dynamics in Astrophysics*, Univ. of Leicester, UK, 5 Sept. 2003
- Mathematical Aspects of Natural Dynamoes*, Caramulo, Portugal, 2 Sept. 2003
- 1. Invited Talk**, *UK GK — Continuum Gyrokinetics Workshop*, Imperial College London, 24 July 2003
- 30th EPS Conference on Controlled Fusion and Plasma Physics*, St. Petersburg, Russia, 8 July 2003
- 25th UK MHD Meeting*, Univ. of Cambridge, 16 May 2003
- New Themes in Plasma and Fluid Turbulence*, The Royal Society, London, 13–14 May 2003
- Magnetic Fields and Star Formation: Theory vs. Observations*, Madrid, 21–25 Apr. 2003
- Workshop on Theoretical Plasma Astrophysics*, ICTP, Trieste, Italy, 19 Nov. 2002
- 9th EUROMECH European Turbulence Conference*, Univ. of Southampton, UK, 5 July 2002
- 29th EPS Conference on Plasma Physics and Controlled Fusion*, Montreux, Switzerland, 20 June 2002
- 24th UK MHD Meeting*, Univ. of Warwick, UK, 23 May 2002
- 199th AAS Meeting*, Washington, DC, 8 Jan. 2002
- 43rd Annual Meeting of the APS Division of Plasma Physics*, Long Beach, CA, 2 Nov. 2001

*1st Theoretical Astrophysics in Southern California (TASC) Meeting*, Caltech, 26 Oct. 2001  
*Workshop on Fronts in Scalar and Vector Geophysical Fields*, NCAR, Boulder, CO, 27–29 June 2001  
*198th AAS Meeting*, Pasadena, CA, 8 June 2001  
*42nd Annual Meeting of the APS Division of Plasma Physics and 10th International Congress on Plasma Physics*,  
Québec City, Canada, 23–27 Oct. 2000  
*Session LXXIV: New Trends in Turbulence*, École de Physique des Houches, France, 31 July–1 Sept. 2000  
*International Sherwood Fusion Theory Meeting*, UCLA, 27–29 March 2000  
*41st Annual Meeting of the APS Division of Plasma Physics*, Seattle, WA, 15–19 Nov. 1999  
*40th Annual Meeting of the APS Division of Plasma Physics*, New Orleans, LA, 16–20 Nov. 1998  
*Large-Scale Turbulence*, Summer School in Nonlinear Science, University of California, Irvine, 3–14 Aug. 1998  
*39th Annual Meeting of the APS Division of Plasma Physics*, Pittsburgh, PA, 17–21 Nov. 1997  
*38th Annual Meeting of the APS Division of Plasma Physics*, Denver, CO, 10–15 Nov. 1996  
*National Undergraduate Fellowship in Plasma Physics and Technology*, Summer School, PPPL,  
Princeton, NJ, Summer 1994