

Richard Dendy: Publications March 2023

Books

“Plasma Physics: An Introductory Course”

R O Dendy, editor

Cambridge University Press, 536pp, 1993.

“Plasma Dynamics”

R O Dendy

Oxford University Press, 172pp, 1990.

Japanese translation, Kodansha Scientific Publishing, 165pp, 1996.

Refereed Journal Articles

(200) “Mechanism for collective energy transfer from neutral beam-injected ions to fusion-born alpha particles on cyclotron timescales in a plasma”

R O Dendy, B Chapman-Oplopoiou, B C G Reman and J W S Cook

Physical Review Letters **130**, 105102 (2023)

(199) “First observation and interpretation of spontaneous collective radiation from fusion-born ions in a stellarator plasma”

B C G Reman, R O Dendy, H Igami, T Akiyama, M Salewski, S C Chapman, J W S

Cook, S Inagaki, K Saito, R Seki, M Toida, M H Kim, S G Thatipamula and G S Yun

Plasma Physics and Controlled Fusion **64**, 085008 (2022)

(198) “Overview of JET results for optimising ITER operation”

J Mailloux, N Abid, K Abraham, P Abreu, O Adabonyan, ..., R O Dendy, ..., W

Zwingmann and I Zychor

Nuclear Fusion **62**, 042026 (2022)

(197) “Enhanced performance in fusion plasmas through turbulence suppression by megaelectronvolt ions”

S Mazzi, J Garcia, D Zarzoso, ..., R O Dendy, ..., W Zwingmann and I Zychor

Nature Physics **18**, 776 (2022)

(196) “Disruption prediction with artificial intelligence techniques in tokamak plasmas”

J Vega, A Murari, S Dormido-Canto, ..., R O Dendy, ..., W Zwingmann and I Zychor

Nature Physics **18**, 741 (2022)

(195) “Novel internal measurements of ion cyclotron frequency range fast-ion driven modes”

N A Crocker, S X Tang, K E Thome, J B Lestz, E Belova, A Zalzali, R O Dendy *et al.*

Nuclear Fusion **62**, 026023 (2022)

(194) “Density dependence of ion cyclotron emission from deuterium plasmas in the Large Helical Device”

B C G Reman, R O Dendy, T Akiyama, S C Chapman, J W S Cook, H Igami, S Inagaki, K Saito, R Seki, M H Kim, S G Thatipamula and G S Yun

Nuclear Fusion **61**, 066023 (2021)

(193) “On the triad transfer analysis of plasma turbulence: symmetrization, coarse-graining, and directional representation”

S Maeyama, M Sasaki, K Fujii, T Kobayashi, R O Dendy, Y Kawachi, H Arakawa and S Inagaki

New Journal of Physics **23**, 043049 (2021)

(192) “Determining 1D fast-ion velocity distribution functions from ion cyclotron emission data using deep neural networks”

B S Schmidt, M Salewski, B Reman, R O Dendy, D Moseev, R Ochoukov, A Fasoli, M Baquero-Ruiz and H Järleblad

Review of Scientific Instruments **92**, 053528 (2021)

(191) “Evaluation of abrupt energy transfer among turbulent plasma structures using singular value decomposition”

M Sasaki, T Kobayashi, R O Dendy, Y Kawachi, H Arakawa and S Inagaki

Plasma Physics and Controlled Fusion **63**, 025004 (2021)

(190) “Development of the ion cyclotron emission diagnostic for the W7-X stellarator”

D Moseev, R Ochoukov, V Bobkov, R O Dendy *et al.*

Review of Scientific Instruments **92**, 033546 (2021)

(189) “Explanation of core ion cyclotron emission from beam-ion heated plasmas in ASDEX-Upgrade by the magnetoacoustic cyclotron instability”

Lunan Liu, R Ochoukov, K G McClements, R O Dendy, V Bobkov, M Weiland, R Bilato, H Faugel, D Moseev, M Salewski, Wei Zhang, Xinjun Zhang, Yubao Zhu, B Chapman, A Zalzali, ASDEX Upgrade team and EUROfusion MST1 team

Nuclear Fusion **61** 026004 (2020)

(188) “Origin of ion cyclotron emission at the proton cyclotron frequency from the core of deuterium plasmas in the ASDEX-Upgrade tokamak”

B Chapman, R O Dendy, S C Chapman, K G McClements and R Ochoukov

Plasma Physics and Controlled Fusion **62**, 095022 (2020)

(187) “High frequency Alfvén eigenmodes detected with ion-cyclotron-emission diagnostics during NBI and ICRF heated plasmas on the ASDEX Upgrade tokamak”

R Ochoukov, R Bilato, V Bobkov, S C Chapman, R O Dendy *et al.*

Nuclear Fusion **60**, 126043 (2020)

(186) “Comparing theory and simulation of ion cyclotron emission from energetic ion populations with spherical shell and ring-beam distributions in velocity-space”

B Chapman, R O Dendy, S C Chapman, L A Holland, S W A Irvine and B C G Reman
Plasma Physics and Controlled Fusion **62**, 055003 (2020)

(185) “Using dynamical mode decomposition to extract the limit cycle dynamics of modulated turbulence in a plasma simulation”

M Sasaki, Y Kawachi, R O Dendy, H Arakawa, N Kasuya, F Kin, K Yamasaki and S Inagaki

Plasma Physics and Controlled Fusion **61**, 112001 (2019)

(184) “Interpretation of suprathreshold emission at deuteron cyclotron harmonics from deuterium plasmas heated by neutral beam injection in the KSTAR tokamak”

B Chapman, R O Dendy, S C Chapman, K G McClements, G S Yun, S G Thatipamula and M H Kim

Nuclear Fusion **59**, 106021 (2019)

(183) “Interpreting observations of ion cyclotron emission from Large Helical Device plasmas with beam-injected ion populations”

B C G Reman, R O Dendy, T Akiyama, S C Chapman, J W S Cook, H Igami, S Inagaki, K Saito and G S Yun

Nuclear Fusion **59**, 096013 (2019)

(182) “Interpretation of core ion cyclotron emission driven by sub-Alfvénic beam-injected ions via magnetoacoustic cyclotron instability”

R Ochoukov, K G McClements, R Bilato, V Bobkov, B Chapman, S C Chapman, R O Dendy, *et al.*

Nuclear Fusion **59**, 086032 (2019)

(181) “Core plasma ion cyclotron emission driven by fusion-born ions”

R Ochoukov, R Bilato, V Bobkov, B Chapman, S C Chapman, R O Dendy, *et al.*

Nuclear Fusion **59**, 014001 (2019)

(180) “Nonlinear wave interactions generate high-harmonic cyclotron emission from fusion-born protons during a KSTAR ELM crash”

B Chapman, R O Dendy, S C Chapman, *et al.*

Nuclear Fusion **58**, 096027 (2018)

(179) “Intrinsic ELMing in ASDEX Upgrade and global control system-plasma self-entrainment”

S C Chapman, P T Lang, R O Dendy, *et al.*

Nuclear Fusion **58**, 126003 (2018)

(178) “Control system-plasma synchronization and naturally occurring edge localized modes in a tokamak”

S C Chapman, P T Lang, R O Dendy, *et al.*

Physics of Plasmas **25**, 062511 (2018)

- (177) “Observations and modelling of ion cyclotron emission observed in JET plasmas using a sub-harmonic arc detection system during ion cyclotron resonance heating”
K G McClements, A Brisset, B Chapman, S C Chapman, R O Dendy, *et al.*
Nuclear Fusion **58**, 096020 (2018)
- (176) “Observations of core ion cyclotron emission on ASDEX Upgrade tokamak”
R Ochoukov, V Bobkov, B Chapman, R Dendy, *et al.*
Review of Scientific Instruments **89**, 10J101 (2018)
- (175) “Particle acceleration during merging-compression plasma start-up in the Mega Amp Spherical Tokamak”
K G McClements, J O Allen, S C Chapman, R O Dendy, *et al.*
Plasma Physics and Controlled Fusion **60**, 025013 (2018)
- (174) “Quantifying fusion born ion populations in magnetically confined plasmas using ion cyclotron emission”
L Carbajal, R O Dendy, S C Chapman and J W S Cook
Physical Review Letters **118**, 105001 (2017)
- (173) “Stimulated emission of fast Alfvén waves within magnetically confined fusion plasmas”
J W S Cook, R O Dendy and S C Chapman
Physical Review Letters **118**, 185001 (2017)
- (172) “Sub-microsecond temporal evolution of edge density during edge localized modes in KSTAR tokamak plasmas inferred from ion cyclotron emission”
B Chapman, R O Dendy, K G McClements, S C Chapman, G S Yun, *et al.*
Nuclear Fusion **57**, 124004 (2017)
- (171) “Efficient generation of energetic ions in multi-ion plasmas by radio-frequency heating”
Y O Kazakov, V G Kiptily, Y Lin, *et al.*
Nature Physics **13**, 973 (2017)
- (170) “Overview of progress in European medium sized tokamaks towards an integrated plasma-edge/wall solution”
H Meyer, T Eich, M Beurskens, *et al.*
Nuclear Fusion **57**, 102014 (2017)
- (169) “Overview of recent physics results from MAST”
A Kirk, J Adamek, R J Akers, *et al.*
Nuclear Fusion **57**, 102007 (2017)
- (168) “Overview of the JET results in support to ITER”
X Litaudon, S Abduallev, M Abhangi, *et al.*
Nuclear Fusion **57**, 102001 (2017)

(167) “The global build-up to intrinsic ELM bursts and comparison with pellet triggered ELMs seen in JET”

S C Chapman, R O Dendy, P T Lang, N W Watkins, F A Calderon, M Romanelli, T N Todd and JET Contributors

Nuclear Fusion **57**, 022017 (2017)

(166) “Delay time embedding of mass loss avalanches in a fusion plasma-oriented sandpile model”

C A Bowie, R O Dendy and M J Hole

Physics of Plasmas **23**, 100703 (2016)

(165) “Overview of MAST results”

I T Chapman, J Adamek, R J Akers, S Allen, ..., R O Dendy, ..., T Yamada and S Zoletnik

Nuclear Fusion **55**, 104008 (2015)

(164) “Electron kinetics inferred from observations of microwave bursts during edge localised modes in the Mega-Amp Spherical Tokamak”

S J Freethy, K G McClements, S C Chapman, R O Dendy, W N Lai, S J P Pamela, V F Shevchenko and R G L Vann

Physical Review Letters **114**, 125004 (2015)

(163) “Velocity space evolution of a minority energetic electron population undergoing the anomalous Doppler instability”

W N Lai, S C Chapman and R O Dendy

Physics of Plasmas **22**, 112119 (2015)

(162) “A quantitative model for heat pulse propagation across large helical device plasmas”

H Zhu, R O Dendy, S C Chapman and S Inagaki

Physics of Plasmas **22**, 062308 (2015)

(161) “The global build-up to intrinsic edge-localized mode bursts seen in divertor full flux loops in JET”

S C Chapman, R O Dendy, T N Todd, N W Watkins, F A Calderon, J Morris and JET Contributors

Physics of Plasmas **22**, 072506 (2015)

(160) “Ion cyclotron emission from fusion-born ions in large tokamak plasmas: a brief review from JET and TFTR to ITER”

R O Dendy and K G McClements

Plasma Physics and Controlled Fusion **57**, 044002 (2015)

(159) “Fast particle-driven ion cyclotron emission (ICE) in tokamak plasmas and the case for an ICE diagnostic in ITER”

K G McClements, R d'Inca, R O Dendy, L Carbajal, S C Chapman, J W S Cook,
R W Harvey, W W Heidbrink and S D Pinches
Nuclear Fusion **55**, 043013 (2015)

(158) “Ion pre-acceleration in fully self-consistent PIC simulations of supercritical perpendicular reforming shocks in multiple ion species plasmas”
V L Rekaa, S C Chapman and R O Dendy
Astrophysical Journal **791**, 26 (2014)

(157) “Time-resonant tokamak plasma edge instabilities?”
A J Webster, R O Dendy, F A Calderon, S C Chapman, E Delabie, ..., and JET EFDA Contributors
Plasma Physics and Controlled Fusion **56**, 075017 (2014)

(156) “Transitions to improved confinement regimes induced by changes in heating in zero-dimensional models for tokamak plasmas”
H Zhu, S C Chapman, R O Dendy and K Itoh
Physics of Plasmas **21**, 062307 (2014)

(155) “Relationship of edge localized mode burst times with divertor flux loop signal phase in JET”
S C Chapman, R O Dendy, T N Todd, N W Watkins, A J Webster, ..., and JET EFDA Contributors
Physics of Plasmas **21**, 062302 (2014)

(154) “Plasma blob formation by ion kinetic Kelvin-Helmholtz and interchange instabilities”
P W Gingell, S C Chapman and R O Dendy
Plasma Physics and Controlled Fusion **56**, 035012 (2014)

(153) “Linear and nonlinear physics of the magnetoacoustic cyclotron instability of fusion-born ions in relation to ion cyclotron emission”
L Carbajal, R O Dendy, S C Chapman and J W S Cook
Physics of Plasmas **21**, 012106 (2014)

(152) “Modelling the measured local time evolution of strongly nonlinear heat pulses in the Large Helical Device”
R O Dendy, S C Chapman and S Inagaki
Plasma Physics and Controlled Fusion **55**, 115009 (2013)

(151) “Overview of physics results from MAST towards ITER/DEMO and the MAST Upgrade”
H Meyer, I Abel, R Akers, ... R O Dendy, ... S Zoletnik, R Zagorski
Nuclear Fusion **53**, 104008 (2013)

- (150) “Self-consistent nonlinear kinetic simulations of the anomalous Doppler instability of suprathreshold electrons in plasmas”
W N Lai, S C Chapman and R O Dendy
Physics of Plasmas **20**, 102122 (2013)
- (149) “Identifying low-dimensional dynamics in type-I edge-localised-mode processes in JET plasmas”
F A Calderon, R O Dendy, S C Chapman, A J Webster, B Alper, R M Nicol, *et al.*
Physics of Plasmas **20**, 042306 (2013)
- (148) “Particle-in-cell simulations of the magnetoacoustic cyclotron instability of fusion-born alpha-particles in tokamak plasmas”
J W S Cook, R O Dendy and S C Chapman
Plasma Physics and Controlled Fusion **55**, 065003 (2013)
- (147) “Statistical characterization and classification of edge-localized plasma instabilities”
A J Webster and R O Dendy
Physical Review Letters **110**, 155004 (2013)
- (146) “Robustness of predator-prey models for confinement regime transitions in fusion plasmas”
H Zhu, S C Chapman and R O Dendy
Physics of Plasmas **20**, 042302 (2013)
- (145) “Plasma heating by ion gyro-scale blobs in the kinetic and fluid regimes”
P W Gingell, S C Chapman and R O Dendy
Plasma Physics and Controlled Fusion **55**, 055010 (2013)
- (144) “Nonclassical transport and particle-field coupling: from laboratory plasmas to the solar wind”
D Perrone, R O Dendy, I Furno, R Sanchez, G Zimbardo, *et al.*
Space Science Reviews **178**, 233 (2013)
- (143) “Vorticity scaling and intermittency in drift-interchange plasma turbulence”
P D Dura, B Hnat, J Robinson and R O Dendy
Physics of Plasmas **19**, 092301 (2012)
- (142) “Transport and evolution of ion gyro-scale plasma blobs in perpendicular magnetic fields”
P W Gingell, S C Chapman, R O Dendy and C S Brady
Plasma Physics and Controlled Fusion **54**, 065005 (2012)
- (141) “Gyrobunching and wave-particle resonance in the lower hybrid drift instability”
J W S Cook, R O Dendy and S C Chapman
Plasma Physics and Controlled Fusion **53**, 074019 (2011)

- (140) “Overview of physics results from MAST”
B Lloyd, R J Akers, F Alladio,...,R O Dendy,..., M Wisse and S Zoletnik
Nuclear Fusion **51**, 094013 (2011)
- (139) “Self consistent kinetic simulations of lower hybrid drift instability resulting in electron current driven by fusion products in tokamak plasmas”
J W S Cook, S C Chapman, R O Dendy and C S Brady
Plasma Physics and Controlled Fusion **53**, 065006 (2011)
- (138) “Electron current drive by fusion-product-excited lower hybrid drift instability”
J W S Cook, S C Chapman and R O Dendy
Physical Review Letters **105**, 255003 (2010)
- (137) “A code to solve the Vlasov Fokker-Planck equation applied to particle transport in magnetic turbulence”
W A Hornsby, A R Bell, R J Kingham and R O Dendy
Plasma Physics and Controlled Fusion **52**, 075011 (2010)
- (136) “Finite Larmor radius effects on test particle transport in drift wave-zonal flow turbulence”
J M Dewhurst, B Hnat and R O Dendy
Plasma Physics and Controlled Fusion **52**, 025004 (2010)
- (135) “Overview of physics results from MAST”
H Meyer, R Akers, F Alladio,...,R O Dendy,...,S Zoletnik and O Zolotukhin
Nuclear Fusion **49**, 104017 (2009)
- (134) “Quantifying the anisotropy and solar cycle dependence of ‘ $1/f$ ’ solar wind fluctuations observed by *Advanced Composition Explorer*”
R M Nicol, S C Chapman and R O Dendy
Astrophysical Journal **703**, 2138-2151 (2009)
- (133) “The effects of nonuniform magnetic field strength on density flux and test particle transport in drift wave turbulence”
J M Dewhurst, B Hnat and R O Dendy
Physics of Plasmas **16**, 072306 (2009)
- (132) “Spatial correlation of solar wind fluctuations and their solar cycle dependence”
R T Wicks, S C Chapman and R O Dendy
Astrophysical Journal **690**, 734-742 (2009)
- (131) “Statistical properties of edge plasma turbulence in the Large Helical Device”
J Dewhurst, B Hnat, N M Ohno, R O Dendy, S Masuzaki, T Morisaki and A Komori
Plasma Physics and Controlled Fusion **50**, 095013 (2008)

- (130) “Characterisation of edge turbulence in relation to edge magnetic field configuration in Ohmic L-mode plasmas in the Mega Amp Spherical Tokamak”
B Hnat, B D Dudson, R O Dendy, G F Counsell, A Kirk and the MAST Team
Nuclear Fusion **48**, 085009 (2008)
- (129) “The signature of evolving turbulence in the quiet solar wind as seen by *Ulysses*”
R M Nicol, S C Chapman and R O Dendy
Astrophysical Journal **679**, 862-870 (2008)
- (128) “Fusion, space, and solar plasmas as complex systems”
R O Dendy, S C Chapman and M Paczuski
Plasma Physics and Controlled Fusion **49**, A95-A108 (2007)
- (127) “Intermittency, dissipation and scaling in two-dimensional magnetohydrodynamic turbulence”
J A Merrifield, S C Chapman and R O Dendy
Physics of Plasmas **14**, 012301 (2007)
- (126) “Overview of physics results from MAST”
B Lloyd, R J Akers, F Alladio, ..., R O Dendy, ..., M Wisse and the MAST and NBI Teams
Nuclear Fusion **47**, S658-S667 (2007)
- (125) “Mutual information as a tool for identifying phase transitions in dynamical complex systems with limited data”
R T Wicks, S C Chapman, and R O Dendy
Physical Review E **75**, 051125 (2007)
- (124) “Characterisation and interpretation of strongly nonlinear phenomena in fusion, space, and astrophysical plasmas”
R O Dendy and S C Chapman
Plasma Physics and Controlled Fusion **48**, B313-B328 (2006)
- (123) “Two-stream instability in collisionless shocks and foreshocks”
M E Dieckmann, B Eliasson, P K Shukla, N J Sircombe and R O Dendy
Plasma Physics and Controlled Fusion **48**, B303-B311 (2006)
- (122) “Aspects of electron acoustic wave physics in laser backscatter from plasmas”
N J Sircombe, T D Arber, and R O Dendy
Plasma Physics and Controlled Fusion **48**, 1141-1154 (2006)
- (121) “Phase speed of electrostatic waves: the critical parameter for efficient electron surfing in plasmas”
M E Dieckmann, N J Sircombe, P K Shukla, M Parviainen and R O Dendy
Plasma Physics and Controlled Fusion **48**, 489-508 (2006)

(120) “The scaling properties of two-dimensional compressible magnetohydrodynamic turbulence”

J A Merrifield, T D Arber, S C Chapman and R O Dendy

Physics of Plasmas **13**, 012305 (2006)

(119) “Surfatron and stochastic acceleration of electrons in astrophysical plasmas”

K G McClements, R O Dendy, M E Dieckmann, A Ynnerman and S C Chapman

Journal of Plasma Physics **71**, 127 (2005)

(118) “Comparison of L-mode and H-mode plasma edge fluctuations in the Mega-Amp Spherical Tokamak”

B D Dudson, R O Dendy, A Kirk, H Meyer and G F Counsell

Plasma Physics and Controlled Fusion **47**, 885-901 (2005)

(117) “Theoretical investigations of frequency sweeping in the Mega-Amp Spherical Tokamak”

R G L Vann, R O Dendy, and M P Gryaznevich

Physics of Plasmas **12**, 032501 (2005)

(116) “Perpendicular shock reformation and ion acceleration”

S C Chapman, R E Lee and R O Dendy

Space Science Reviews **121**, 5-19 (2005)

(115) “The scaling properties of dissipation in incompressible MHD turbulence”

J A Merrifield, W C Müller, S C Chapman, and R O Dendy

Physics of Plasmas **12**, 022301 (2005)

(114) “Mutual information between geomagnetic indices and the solar wind as seen by WIND: implications for propagation time estimates”

T K March, S C Chapman, and R O Dendy

Geophysical Research Letters **32**, L04101 (2005)

(113) “Accelerated electron populations formed by Langmuir wave-caviton interactions”

N J Sircombe, T D Arber, and R O Dendy

Physics of Plasmas, **12**, 012303 (2005)

(112) “Reforming perpendicular shocks in the presence of pickup protons: initial ion acceleration”

R E Lee, S C Chapman, and R O Dendy

Annales Geophysicae **23**, 643-650 (2005)

(111) “Ion acceleration processes at reforming collisionless shocks”

R E Lee, S C Chapman, and R O Dendy

Physics of Plasmas, **12**, 012901 (2005)

(110) “Recurrence plot statistics and the effects of embedding”

T K March, S C Chapman, and R O Dendy
Physica D, **200**, 171-184 (2005).

(109) “Laboratory plasma astrophysics experiments using lasers”
N C Woolsey, C Courtois, and R O Dendy
Plasma Physics and Controlled Fusion, **46**, B397-B405 (2004)

(108) “Robustness and scaling: key observables in the dynamic magnetosphere”
S C Chapman, R O Dendy, and N W Watkins
Plasma Physics and Controlled Fusion, **46**, B157-B166 (2004)

(107) “Complexity and criticality in fusion, space, and astrophysical plasmas”
R O Dendy, S C Chapman, and T K March
Physica A **340**, 607-616 (2004)

(106) “Experiment on collisionless plasma interaction with applications to supernova remnant physics”
C Courtois, R A D Grundy, A D Ash, D M Chambers, N C Woolsey, R O Dendy, and K G McClements
Physics of Plasmas **11**, 3386-3393 (2004)

(105) “Off-axis electron cyclotron heating and the sandpile paradigm for transport in tokamak plasmas”
T K March, S C Chapman, R O Dendy, and J A Merrifield
Physics of Plasmas **11**, 659-665 (2004)

(104) “Numerical simulations of local shock reformation and ion acceleration in supernova remnants”
R E Lee, S C Chapman, and R O Dendy
Astrophysical Journal **604**, 187-195 (2004)

(103) “Probability distribution functions for ELM bursts in a series of JET tokamak discharges”
J Greenhough, S C Chapman, R O Dendy, and D J Ward
Plasma Physics and Controlled Fusion **45**, 747-758 (2003)

(102) “Transport and confinement in the Mega Amp Spherical Tokamak”
R J Akers, J W Ahn, ..., R O Dendy, ...(MAST team)
Plasma Physics and Controlled Fusion **45**, A175-A204 (2003)

(101) “Solar flares as cascades of reconnecting magnetic loops”
D Hughes, M Paczuski, R O Dendy, P Helander, and K G McClements
Physical Review Letters **90**, 131101 (2003)

(100) “Fully nonlinear phenomenology of the Berk-Breizman system”
R G L Vann, R O Dendy, G Rowlands, T Arber, and N d'Ambrunil

Physics of Plasmas **10**, 623-630 (2003)

(99) "Statistical characterisation of full-disk EUV/XUV solar irradiance and correlation with solar activity"

J Greenhough, S C Chapman, R O Dendy, V M Nakariakov, and G Rowlands
Astronomy and Astrophysics **409**, L17-L20 (2003)

(98) "Self organisation of edge and internal pedestals in a sandpile"

S C Chapman, R O Dendy, and B Hnat
Plasma Physics and Controlled Fusion **45**, 301-308 (2003)

(97) "Identification of a 12-17 day timescale in X-ray observations of GRS 1915+105"

J Greenhough, S C Chapman, S Chaty, R O Dendy, and G Rowlands
Monthly Notices of the Royal Astronomical Society **340**, 851-855 (2003)

(96) "Electron pre-acceleration mechanisms in the foot region of high Alfvénic Mach number shocks"

H Schmitz, S C Chapman, and R O Dendy
Astrophysical Journal **579**, 327 (2002).

(95) "Energetic particles in magnetic confinement systems: synergies beyond fusion"

R O Dendy, K G McClements, M E Dieckmann and N C Woolsey
Nuclear Fusion **42**, 986 (2002).

(94) "The influence of electron temperature and magnetic field on cosmic ray injection at high Mach number shocks"

H Schmitz, S C Chapman and R O Dendy
Astrophysical Journal **570**, 637 (2002).

(93) "The role of clustering effects in non-diffusive transport in tokamaks"

J P Graves, R O Dendy, K I Hopcraft, and E Jakeman
Physics of Plasmas **9**, 1596 (2002).

(92) "Characterising anomalous transport in accretion discs from X-ray observations"

J Greenhough, S C Chapman, S Chaty, R O Dendy and G Rowlands
Astronomy and Astrophysics **385**, 693 (2002).

(91) "Non-Gaussian transport in strong plasma turbulence"

S V Annibaldi, G Manfredi, and R O Dendy
Physics of Plasmas **9**, 791 (2002).

(90) "Surfatron and stochastic acceleration of electrons at supernova remnant shocks"

K G McClements, M E Dieckmann, A Ynnerman, S C Chapman and R O Dendy
Physical Review Letters **87**, 255002 (2001).

(89) "Shock acceleration of cosmic rays: a critical review"

J G Kirk and R O Dendy

Journal of Physics G **27**, 1589 (2001).

(88) “A sandpile model with tokamak-like enhanced confinement phenomenology”

S C Chapman, R O Dendy and B Hnat

Physical Review Letters **86**, 2814 (2001).

(87) “Zonal flow and streamer generation in drift turbulence”

G Manfredi, R O Dendy and C M Roach

Plasma Physics and Controlled Fusion **43**, 825 (2001).

(86) “Collisionless shock and supernova remnant simulation experiments on VULCAN”

N C Woolsey, ... , P Carolan, R O Dendy, P Helander, ... , S J Rose

Physics of Plasmas **8**, 2439 (2001).

(85) “A simple avalanche model for astrophysical and laboratory confinement systems”

S C Chapman, R O Dendy and B Hnat

Physics of Plasmas **8**, 1969 (2001).

(84) “Testing the SOC hypothesis for the magnetosphere”

N W Watkins, M P Freeman, S C Chapman and R O Dendy

Journal of Atmospheric and Solar-Terrestrial Physics **63**, 1435 (2001).

(83) “Electron acceleration due to high frequency instabilities at supernova remnant shocks”

M E Dieckmann, K G McClements, S C Chapman, R O Dendy and L O'C Drury

Astronomy and Astrophysics **356**, 377 (2000).

(82) “Evidence for strange kinetics in Hasegawa-Mima turbulent transport”

S V Annibaldi, G Manfredi, R O Dendy and L O'C Drury

Plasma Physics and Controlled Fusion **42**, L13 (2000).

(81) “Sawtooth evolution during JET ICRH pulses”

J P Graves, K I Hopcraft, R O Dendy, R J Hastie, K G McClements and M Mantsinen

Physical Review Letters **84**, 1204 (2000).

(80) “A sandpile model with dual scaling regimes for laboratory, space and astrophysical plasmas”

S C Chapman, R O Dendy and G Rowlands

Physics of Plasmas **6**, 4169 (1999).

(79) “Robustness of collective behaviour in strongly driven avalanche models: magnetospheric implications”

N W Watkins, S C Chapman, R O Dendy and G Rowlands

Geophysical Research Letters **26**, 2617 (1999).

- (78) “Exactly solvable sandpile with fractal avalanching”
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