J. D. GIBBON: PUBLICATION LIST (August 2018)

1 Papers

125. The Pharmacopoeia Mathematica, The Mathematical Intelligencer, published on-line 21st August 2018, https://doi.org/10.1007/s00283-018-9806-6

124. Weak & strong solutions of the 3D Navier-Stokes equations & their relation to a chessboard of convergent inverse length scales, J. Nonlin. Sci., https://doi.org/10.1007/s00332-018-9484-8

123. The role of BKM-type theorems in Euler, Navier-Stokes and Cahn-HilliardNavier-Stokes analysis (with Anupam Guptab, Nairita Pal and Rahul Pandit) Physica D 376377, 60–68, (2018).

122. Martin David Kruskal – a memoir, *Biographical Memoirs of Fellows of the Royal Society*, **64**, 2018. Published on-line 30 August 2017.DOI: 10.1098/rsbm.2017.0022

121. Integrability of the hyperbolic reduced Maxwell-Bloch equations for strongly correlated Bose-Einstein condensates (with Alexis Arnaudon) ; Phys. Rev. A **36**, 013610, (2017).

120. Lyapunov dimension of elastic turbulence (with E. L. C. VI. M. Plan, A. Gupta & D. Vincenzi), JFM Rapids, **822**, R4, doi:10.1017/jfm.2017.267 (2017). arXiv : 1701.02366v1 [physics.flu-dyn] 6 Jan 2017.

119. Bounds on solutions of the rotating, stratified, incompressible, non-hydrostatic, three-dimensional Boussinesq equations (with D. D. Holm) ; Nonlinearity **30**, R1R24, (2017). arXiv:1611.01976v1 [nlin.CD] (7th Nov 2016)

118. Regularity criterion for solutions of the three-dimensional Cahn-Hilliard-Navier-Stokes equations and associated computations (with Nairita Pal, Anupam Gupta and Rahul Pandit) ; Phys. Rev. E **94**, 063103 (2016).

117. Depletion of Nonlinearity in Magnetohydrodynamic Turbulence: Insights from Analysis and Simulations. (with A. Gupta, G. Krstulovic, R. Pandit, H. Politano, Y. Ponty, A. Pouquet, G. Sahoo, and J. Stawarz), Phys. Rev. E, **93**, 043104 (2016).

116. Nonlinear effects in buoyancy-driven variable density turbulence (with P. Rao and C. P. Caulfield) ; J. Fluid Mech. **810**, 362–377, 2017.

115. High-low frequency slaving and regularity issues in the 3D Navier-Stokes equations, IMA J. Appl. Math. **81**(2), 308–320 (2016).

114. Modal dependency and nonlinear depletion in the 3D Navier-Stokes equations ; Recent Progress in the Theory of the Euler and Navier-Stokes equations, (eds. James C. Robinson, José L. Rodrigo, Witold Sadowski and Alejandro Vidal-López), London Mathematical Society Lecture Note Series, **430**, 57–76, Cambridge University Press, 2016.

113. Regimes of nonlinear depletion and regularity in the 3D Navier-Stokes equations, (with D. Donzis, R. M. Kerr, A. Gupta, R. Pandit & D. Vincenzi), Nonlinearity, **27**, 1-19, 2014, (ArXiv:1402.1080v3).

112. Vorticity moments in four numerical simulations of the $3D$ Navier-Stokes equations (with D. Donzis, R. M. Kerr, A. Gupta, R. Pandit & D. Vincenzi) 2013 : J. Fluid Mech., **732**, pp. 316–331, (2013).

111. The three-dimensional Euler equations with a passive scalar : a road to blow-up (with E. S. Titi) : J. Non. Sci., **23** (issue 6), 993–1000, (2013).

110. Enstrophy bounds and the range of space-time scales in the hydrostatic primitive equations (with D. D. Holm), Phys. Rev. E **87**, 031001(R) (2013).

109. Stretching and folding processes in the 3D Navier-Stokes and Euler equations (with D. Holm) : Procedia IUTAM, **9**, 25–31, (2013). (Proceedings of IUTAM Symposium on the understanding of common aspects of extreme events in fluids, Dublin, 2012).

108. Dynamics of scaled vorticity norms for the three-dimensional Navier-Stokes and Euler equations, Procedia IUTAM, **7**, 39–48, (2013). Proceedings of IUTAM Symposium Topological Fluid Dynamics II, Cambridge (2012).

107. Quasi-conservation laws for compressible 3D Navier-Stokes flow (with D. D. Holm) ; Phys. Rev. E **86**, 047301 (2012).

106. Conditional regularity of solutions of the three dimensional Navier-Stokes equations & implications for intermittency : J. Math. Phys., **53**, 115608, (2012).

105. Sharp constants in the Sobolev embedding theorem & a derivation of the Brezis-Gallouet interpolation inequality (M. V. Bartuccelli & J. D. Gibbon) : J. Math. Phys., **52**, 093706 (2011).

104. A hierarchy of length scales for solutions of the three-dimensional Navier-Stokes equations; Comm Math. Sci., **10**, No. 1, pp. 131–136, 2011.

103. Stretching & folding diagnostics in solutions of the three-dimensional Euler & Navier-Stokes equations, (with D. D. Holm) : *Mathematical Aspects of Fluid Mechanics*, pgs 201—220, edited by J. C. Robinson, J. L. Rodrigo & W. Sadowski, Cambridge University Press 2012.

102. The gradient of potential vorticity, quaternions and an orthonormal frame for fluid particles (with D. D. Holm), Geophysical and Astrophysical Fluid Dynamics ; ISSN 0309-1929 print/ISSN 1029-0419 online, 2010 Taylor & Francis.

101. The dynamics of the gradient of potential vorticity (with D. D. Holm), J. Phys. A: Math. Theor. **43** (2010) 172001.

100. Extreme events in solutions of hydrostatic and non-hydrostatic climate models, (with D. D. Holm) : Phil. Trans. R. Soc. A 28 March 2011, **369**, no. 1939, 1156-1179 (arXiv:0902.0066v3 [nlin.CD])

99. Regularity and singularity in solutions of the three-dimensional Navier-Stokes equations, Proc. Royal Soc A, **466**, 2587-2604, 2010. published online 17 March 2010, doi: 10.1098/rspa.2009.0642 (arXiv:0905.0344v3 [nlin.CD])

98. Kähler geometry and Burgers vortices (with I. Roulstone, B. Banos & V. N. Roubtsov), Proc. Ukrainian Natl. Acad. Math. **16**, no. 2, (2009) 303–321.

97. A geometric interpretation of coherent structures in Navier-Stokes flows (with I. Roulstone, B. Banos & V. N. Roubtsov): Proc. R. Soc. A, **465**, (2009) 2015-2021.

96. Estimating intermittency in three-dimensional Navier-Stokes turbulence; Journal of Fluid Mechanics, **625** (2009), 125-133.

95. The three-dimensional Euler equations: singular or non-singular? (with M. Bustamante and R. M. Kerr), A contribution to *Nonlinearity's* 'Open Problems' series; Nonlinearity **21**, (2008) T123–T129.

94. Estimates for the LANS-α, Leray-α & Bardina models in terms of a Navier-Stokes Reynolds number (with D. D. Holm); Indiana University Math. Journal, **57**, No. 6 (2008), 2761–2773.

93. Quaternions and ideal flows (with H. Eshraghi), J. Phys. A: Math. Theor. **41**, (2008) 344004.

92. The three-dimensional Euler equations: Where do we stand? Survey Lecture at the meeting *Euler equations 250 years on*, – Proceedings of an international conference Aussois, France, 18-23 June 2007 : edited by Gregory Eyink, Uriel Frisch, René Moreau and Andre Sobolevski, Physica D **237**, (2008) 1894–1904.

91. Ortho-normal quaternion frames, Lagrangian evolution equations and the three-dimensional Euler equations, Russian Math. Surveys **62:3** 1–26, (Uspekhi Mat. Nauk **62:3** 47–72, 2007. DOI 10.1070/RM2007v062n03ABEH004411

90. Lagrangian analysis of alignment dynamics for isentropic compressible magnetohydrodynamics (with D. D. Holm), New Journal of Physics **9**, 292–306, (2007).

89. Lagrangian particle paths & ortho-normal quaternion frames (with D. D. Holm), Nonlinearity **20,** 1745-1759, 2007.

88. Estimates for the two-dimensional Navier-Stokes equations in terms of the Reynolds number (with G. A. Pavliotis) J. Math. Phys, **48,** 065202, 2007.

87. Length-scale estimates for the LANS-α equations in terms of the Reynolds number, (with D. D. Holm), Physica D, **220**, 69–78, 2006; doi:10.1016/j.physd.2006.06.012

86. Quaternions and particle dynamics in the Euler fluid equations, J. D. Gibbon, D. D. Holm, R. M. Kerr and I. Roulstone, Nonlinearity **19**, 1969-1983, 2006.

85. Exponentially growing solutions in homogeneous Rayleigh-Bénard convection, (with E. Calzavarini, C. R. Doering, D. Lohse, A. Tanabe, and F. Toschi), Phys. Rev. E **73**, 035301, 2006.

84. Cluster formation in complex multi-scale systems (with E. Titi); Proc Royal Soc., **461**, 3089–3097, 2005. DOI ref: dx.doi.org/10.1098/rspa.2005.1548

83. Intermittency & regularity issues in three-dimensional Navier-Stokes turbulence (with C. R. Doering). Arch. Rat. Mech. Anal., **177**, 115–150, 2005.

82. A Bound on Mixing Efficiency for the Advection–Diffusion Equation (with J-L. Thiffeault & C. R. Doering); Journal of Fluid Mechanics, **521**, 105-114, 2004.

81. Exact, infinite energy, blow-up solutions of the three-dimensional Euler equations (with D. R. Moore & J. T. Stuart), Nonlinearity, **16**, 1823-1831, 2003.

80. Intermittency is solutions of the three-dimensional Navier-Stokes equations (with C. R. Doering), J. Fluid Mech., **478**, 227-235, 2003.

79. A quaternionic structure in the three-dimensional Euler and ideal MHD equations, Physica D, **166**, 17-28, 2002.

78. Bounds on moments of the energy spectrum for weak solutions of the 3D Navier-Stokes equations (with C. R. Doering), Physica D, **165**, 163-175, 2002.

77. Singularity formation in a class of stretched solutions of the equations for ideal MHD (with K. Ohkitani), Nonlinearity, **14**, 1239-1264, 2001.

76. Numerical study of singularity formation in a class of Euler and Navier-Stokes flows (with K. Ohkitani), Physics of Fluids, **12**, 3181-3194, 2000.

75. Scale separation and regularity of the Navier-Stokes equations (with C. R. Doering) in *Intermittency in Turbulent Flows and other Dynamical Systems* ed. J. C. Vassilicos, Cambridge University Press, Isaac Newton Institute Series, 2000.

74. "Stretching & compression of vorticity in the 3D Euler equations" (with B. Galanti & R. Kerr), in *Turbulence structure and vortex dynamics*, pp 23-34, eds J. C. R. Hunt and J. C. Vassilicos, Cambridge University Press 2000.

73. Vorticity alignment results for the 3D Euler and Navier-Stokes equations, Trends in Mathematics, (Birkhauser) pp 25-32, 1999.

72. Dynamically stretched vortices as solutions of the 3D Navier-Stokes equations (with A. S. Fokas and C. R. Doering), Physica D, **132**, 497-510, 1999.

71. Extending Lundgren's transformation to construct stretched vortex solutions of the 3D Navier-Stokes and Euler equations, Proceedings of the NCAR June 16th-19th 1998 conference, published in *Developments in Geophysical Turbulence*, Kluwer.

70. A logarithmic $3d$ Euler inequality (with M. Heritage & J. Gibbons); Phys. Fluids, **9**(2), 471-472, 1997.

69. Angular dependence and growth of vorticity in the 3D Euler equations (with M. Heritage), Phys. Fluids, A, **9**, 901-909, 1997.

68. Vorticity alignment results for the $3D$ Euler and Navier-Stokes equations (with B. Galanti and M. Heritage), Nonlinearity, **10**, 1675-1695, 1997.

67. Attractor dimension and small length scale estimates for the $3d$ Navier-Stokes equations (with E. S. Titi): Nonlinearity, **10**, 109-119, 1997.

66. Dimensions of attractors and small length scales in solutions of the two- and three-dimensional Navier-Stokes equations, in *Advances in Fluid Mechanics "Nonlinear Instability Analysis"* pgs 1-42, Computational Mechanics Publications, (ed. L. Debnath & S. R. Choudhury 1997).

65. Length scales in solutions of the complex Ginzburg Landau equation (with M. V. Bartuccelli and M. Oliver); Physica **89D**, 267-286, 1996.

64. A voyage around the Navier-Stokes equations: Physica **92D**, 133-139, 1996

63. "Analysis of the $2d$ and $3d$ Navier-Stokes equations": in *Nonlinear Mathematics and its applications* edited by P. J. Aston, Cambridge University Press, pp. 121-146, 1996 (Lectures given at the EPSRC Nonlinear Mathematics Spring School, Surrey, 1995).

62. A conjecture regarding local behaviour of vorticity in the $3d$ incompressible Navier-Stokes equations: Physics Letters **A203**, 181-188, 1995.

61. Estimates of the the shape and dimension of the Lorenz attractor: Dynamics and Stability of Systems, **10**, 255-268, 1995, (with C. R. Doering).

60. Length scales and ladder theorems for $2d$ and $3d$ convection: Nonlinearity, **8**, 81-92, 1995.

59. Weak and strong solutions of the CGL equation: Physica **71D**, 285-318, 1994 (with C. D. Levermore and C. R. Doering).

58. Derivation of $3d$ Navier-Stokes length scales from a result of Foias, Guillope and Temam; Nonlinearity **7**, 245-252, 1994.

57. Length scales in solutions of the Navier-Stokes equations: Nonlinearity **6**, 549-568, 1993 (with M. Bartuccelli, C. R. Doering and S. J. Malham).

56. Lattice methods and the pressure field for solutions of the $3d$ Navier-Stokes equations: Nonlinearity, **6**, 79-91, 1993 (with S. J. A. Malham and M. V. Bartuccelli).

55. Ladder theorems for the $2d$ and $3d$ Navier-Stokes equations on a finite periodic domain (with M. Bartuccelli and C. R. Doering), Nonlinearity **4**, 531-542, 1991.

54. Note on the Constantin-Foias-Temam attractor dimension estimate for two-dimensional turbulence. Physica **48D**, 471-480, 1991 (with C. R. Doering)

53. Coupled NLS equations for counter-propagating waves for systems with reflection symmetry (with E. Knobloch); Phys. Lett. **154**(7-8), 1991.

52. On the possibility of soft and hard turbulence in the complex Ginzburg Landau equation: Physica **44D**, 421-444, 1990 (with P. Constantin, C. R. Doering, M. Gisselfalt and M. Bartuccelli).

51. Finite dimensionality in the complex Ginzburg Landau equation, (with C. R. Doering and D. D. Holm) in *Nonlinear evolution equations: integrability and spectral methods* , edited by A. Degasperis, A. P. Fordy and M. Lakshmanan, Manchester University Press, 1990 pp. 462-476.

50. "Why the NLS equation is simultaneously a success, a failure and a mediocrity in the theory of nonlinear waves": in *Nonlinear evolution equations: integrability and spectral methods* , edited by A. Degasperis, A. P. Fordy and M. Lakshmanan, Manchester University Press, 1990.

49. Finite dimensional attractor in the laser equations (with P. Constantin and C. Foias); Nonlinearity **2**, 241-269, 1989.

48. Low dimensional behaviour in the CGL equation: (with C. R. Doering, D. D. Holm and B. Nicolaenko), Contemporary Mathematics **99**, 117-141, 1989.

47. Hard turbulence in a finite dimensional dynamical system (with M. Bartuccelli, P. Constantin, C. R. Doering and M. Gisselfalt), Physics Letts **142A**, 349-356, 1989.

46. Lax pairs, Bäcklund transformations & special solutions for ordinary differential equations (with A. C. Newell, M. Tabor & Y. B. Zheng), Nonlinearity, **1**, 481-490, 1988.

45. Finite dimensionality in the complex Ginzburg Landau equation, (with C. R. Doering, D. D. Holm and B. Nicolaenko), Contemporary Mathematics, AMS, Providence, Rhode Island **99**, 117-142, 1989 (edited by B. Nicolaenko).

44. Finite dimensionality in the laser equations in the good cavity limit (with J. N. Elgin, C. R. Doering and D.D. Holm), Physics Letts, **129A**, 310-5, 1988.

43. Low dimensional behaviour in the CGL equation: Nonlinearity **1**, 279-309, 1988 (with C.R. Doering, D. D. Holm and B. Nicolaenko).

42. Finite upper bound on the Lyapunov dimension in the CGL equation, (with C. Doering, D.D. Holm and B. Nicolaenko), Phys. Rev. Lett., **59**, 2911-4, 1987.

41. Aspects of the Painlevé property for partial differential equations (with M. Tabor: Physica D, **18**, 180-9, 1986.

40. Theoretical and computational study of the soliton laser (with J.N. Elgin, F. If, P. Christiansen & O. Skovgaard), Optics Comm., **57**, 350, 1986.

39. A numerical model of the soliton laser (with J.N. Elgin, F. If, P. Christiansen & O. Skovgaard), Physica D, **23**, 362, 1986.

38. "Modulational Instabilities in homogeneously broadened lasers", (with J. N. Elgin, J. Molina-Garza and D. Wood) pp.246 in *Nonlinear phenomena and chaos* (ed. S. Sarkar) Adam Hilger, 1986.

37. Spatial effects & the Eckhaus instability in the laser & Lorenz equations (with J. N. Elgin, C. Holmes, J. Molina-Garza & N. Readwin, Physica D, **23**, 19-26, 1986.

36. On the one- and two-dimensional Toda lattices & the Painlevé property (with M. Tabor), J. Math Phys., **26**, 1956-60, 1985.

35. The Painlevé property & Hirota's method (with P. Radmore, D. Wood and M. Tabor), Stud. Appl. Math., **72**, 39-63, 1985.

34. Hirota's method and the Painleve property: (with M. Tabor) page 55 "Dynamical Problems in Soliton systems" (ed. S. Takeno) Springer 1985.

33. A survey of the origins and physical importance of soliton equations; Phil Trans Royal Soc Lond., 315A, 335-65, 1985. (Also published by the Royal Society as a book 1985 New developments in the theory and applications of solitons, edited by J. D. Gibbon, G. Wilson and Sir Michael Atiyah FRS).

32. The real and complex Lorenz equations and their relevance to physical systems, Physica D, **7**, 135-150, 1983 (Special issue, *Order in Chaos*).

31. Collapse in the n-dimensional NLS equation - a parallel with Sundman's theorems in the N-body problem (with F.H. Berkshire): Studies in Appl. Math., **69**, 229-62, 1983.

30. Dispersive instabilities in nonlinear systems: The real and complex Lorenz equations; Article in "Chaos and Order in Nature", pages 92-101, Springer Series in Synergetics, editor H. Haken, 1982.

29. Amplitude equations at the critical points of unstable dispersive physical systems (with M.J. McGuinness); Proc. Roy. Soc. London, 1981, **A377**, 185-219.

28. A study of the effect of mode truncation on an exact periodic solution of an infinite set of Lorenz equations (with M. Booty and A. C. Fowler); Phys. Letts., **87A**, 261-5, 1982.

27. The complex Lorenz equations (with A.C. Fowler and M.J. McGuinness); Physica D, (Nonlinear Phenomena), **4D**, 139, 1982.

26. The real and complex Lorenz equations in rotating fluids and lasers (with M.J. McGuinness); Physica D, (Nonlinear Phenomena), **5D**, 108-22, 1982.

25. The real and complex Lorenz equations; Proceedings of the Royal Irish Academy **83A**, 17-22, 1983 - Proc. of the Nonlinear Wave conference held in Trinity College Dublin, May 1980.

24. A general derivation of the Lorenz equations for some unstable dispersive physical systems (with M. J. McGuinness); Phys. Letts., **77A**, 259-63, 1980.

23. Nonlinear focussing and the Kelvin Helmholtz instability (with M. J. McGuinness); Physics Letts., **77A**, 118-21, 1980.

22. An example of soliton behaviour in a rotating baroclinic fluid (with I. N. James and I.M. Moroz); Proc. Roy. Soc. London, **A367**, 219-37, 1979.

21. The sine-Gordon equation as a model for a rapidly rotating baroclinic fluid (with I.N. James and I.M. Moroz); Physics Scripta special issue on solitons and their applications to science and technology; **20**, 402-408, 1979.

20. The prolongation structure of a class of nonlinear evolution equations (with R.K. Dodd); Proc. Roy. Soc. London, **A359**, 411-33, 1978.

19. Correspondence between classical $\lambda\phi^4$, double and single sine-Gordon equations for 3-dimensional solitons (with N.C. Freeman and R.S. Johnson); Phys. Letts., **65A**, 380-2, 1978.

18. Multiple soliton-like solutions of nonlinear Klein-Gordon equations in three dimensions (with N.C. Freeman and A. Davey); J. Phys. A, **11**, L93-96, 1978.

17. The prolongation structure of a higher order KdV equation (with R. K. Dodd); Proc. Roy. Soc. London, **A358**, 287-96, 1977.

16. Wobbling & leapfrogging in SIT (with R. K. Bullough. S. Duckworth, P. J. Caudrey, H. M. Gibbs, B. Bölger & L. Baede) ; Optics Comm., **18**, 200, 1976.

15. Unusual behaviour in the SIT of $Q(2)$ vibration-rotation transitions (with S. Duckworth, R.K. Bullough and P.J. Caudrey); Phys. Letts., **57A**, 19-22, 1976.

14. A new hierarchy of Korteweg-de Vries equations (with R.K. Dodd and P.J. Caudrey); Proc. Roy. Soc. London **A351**, 407-22, 1976.

13. A modified long wave equation with an exact 2-soliton solution (with R.K. Dodd and J.C. Eilbeck); J. Phys. A, **9**, 1976.

12. The interaction of n-dimensional soliton wavefronts (with G. Zambotti); Il Nuovo Cimento, **288**, 1-17, 1975.

11. The sine-Gordon equation as a model classical field theory (with J.C. Eilbeck and P.J. Caudrey); Il Nuovo Cimento, **258**, 497-512, 1975.

10. A general theory of Self-Induced Transparency (review paper) (with R.K. Bullough, P.J. Caudrey and J.C. Eilbeck); J. Opto-electronics, **6**, 121-140, 1974.

9. N-Soliton solutions of some non-linear dispersive wave equations of physical significance, J. D. Gibbon, P. J. Caudrey, R. K. Bullough and J C Eilbeck, Lecture Notes in Mathematics, **415**, 1974, Ordinary and Partial Differential Equations Proceedings of the Conference held at Dundee, Scotland, 26th29th March, 1974. Editors : B. D. Sleeman & I. M. Michael, ISBN : 978-3-540-06959-1 (Print) 978-3-540-37264-6 (Online).

8. Exact multisoliton solution of the Reduced Maxwell-Bloch equations of nonlinear optics (with J. C. Eilbeck and P. J. Caudrey); J.I.M.A., **14**, 375-86, 1974.

7. An N-soliton solution of a nonlinear optics equation derived by an inverse method (with J.C. Eilbeck and P.J. Caudrey); Lett. Nuovo Cimento, **8**, 773-9, 1973.

6. Multiple soliton and bisoliton bound state solutions of the sine-Gordon equaiton and related equations in nonlinear optics (with P.J. Caudrey, J.C. Eilbeck and R.K. Bullough); J. Phys. A, **6**, L122, 1973.

5. Exact multi-soliton solutions of the SIT and sine-Gordon equations (with J.C. Eilbeck, P.J. Caudrey and R.K. Bullough); Phys. Rev. Letts., **30**, 237-8, 1973.

4. Exact multisoliton solutions of the inhomogeneously broadened SIT equations (with P.J. Caudrey, J.C. Eilbeck and R.K. Bullough); J. Phys. A, **6**, L53, 1973.

3. Solitons in nonlinear optics: A more accurate description of the 2π pulse in SIT (with J.C. Eilbeck, R.K. Bullough and P.J. Caudrey); J. Phys. A, **6**, 1337-47, 1973.

2. The asymptotic form of the N-soliton solution of the Korteweg-de Vries equation (with J.C. Eilbeck); J. Phys. A, **5**, L132, 1972.

1. A proposed N-soliton solution of a nonlinear optics equation (with J.C. Eilbeck); J. Phys. A., **5**, L122, 1972.

2 Books

1. *Solitons and Nonlinear Wave Equations* (with J.C. Eilbeck, R.K. Dodd and H.C. Morris), Academic Press, 1982.

   1986/7 Russian Translation by Mir Publishing House of the above book.

2. *New developments in the theory and application of Solitons*, (eds Sir Michael Atiyah, J. D. Gibbon & and Dr G. Wilson), The Royal Society, 1985.

3. *Applied Analysis of the Navier-Stokes equations* Cambridge University Press 1995 in their series Cambridge Texts in Applied Mathematics.

4. *Science and the Knowledge of God*, Lampion Press, 2015. ISBN: 978-1-942614-06-7