Publications J. P. Goedbloed *et al.*

https://orcid.org/0000-0002-8794-472x

1. J. P. Goedbloed, 'Fluorescence of γ-irradiated DNA solutions', *Int. J. Radiat. Biol.* **12**, 383–384 (1967).

2. J. P. Goedbloed and J.J. van Hemmen, 'Fluorescence of γ-irradiated DNA and purines in aqueous solution', *Int. J. Radiat. Biol.* **14**, 351–361 (1968).

3. R. F. de Vries, R. J. J. van Heijningen, C. Bobeldijk, J. P. Goedbloed, P. C. T. van der Laan and W. Schuurman, 'Optimal longitudinal currents for the toroidal screw pinch', Proc. 3rd Eur. Conf. on *Controlled Fusion and Plasma Physics*, 23–27 June 1969, Utrecht (Wolters-Noordhof, Groningen) 88 (1969).

4. J. P. Goedbloed, 'Stability of a sharp screw pinch', *Phys. Rev. Lett.* **24**, 253–255 (1970).

5. J. P. Goedbloed, 'Stabilization of pinch instabilities by force-free magnetic fields', Proc. 4th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 31 Aug.–4 Sept. 1970, Rome, 47 (1970).

6. J. P. Goedbloed, *Stabilization of magnetohydrodynamic instabilities by force-free magnetic fields. A marginal-stability analysis*, thesis Eindhoven University (1970).

7. J. P. Goedbloed, 'Stabilization of magnetohydrodynamic instabilities by force-free magnetic fields. I. Plane plasma layer', *Physica* **53**, 412–444 (1971).

8. J. P. Goedbloed, 'Stabilization of magnetohydrodynamic instabilities by force-free magnetic fields. II. Linear pinch', *Physica* **53**, 501–534 (1971).

9. J. P. Goedbloed, 'Stabilization of magnetohydrodynamic instabilities by force-free magnetic fields. III. Shearless magnetic fields', *Physica* **53**, 535–570 (1971).

10. J. P. Goedbloed and R. Y. Dagazian, 'Kinks and tearing modes in simple configurations', *Phys. Rev.* **A4**, 1554–1560 (1971).

11. P. C. T. van der Laan, W. Schuurman, J. W. A. Zwart and J. P. Goedbloed, 'On the decay of the longitudinal current in toroidal screw pinches', Proc. 4th Intern. IAEA Conf. on *Plasma Physics and Controlled Nuclear Fusion Research*, 17–23 June 1971, Madison, USA (IAEA, Vienna) Vol. **I**, 217–223 (1971).

12. J. P. Goedbloed and W. Schuurman, 'Effects of force-free fields on plasma stability', *Plasma Physics* **14**, 1–10 (1972).

13. J. P. Goedbloed and H. J. L. Hagebeuk, 'Growth rates of instabilities of a diffuse linear pinch', *Phys. Fluids* **15**, 1090–1101 (1972).

14. J. P. Goedbloed, D. Pfirsch and H. Tasso, 'Instability of a pinch surrounded by a resistive wall', *Nucl. Fusion* **12**, 649–657 (1972).

15. J. P. Goedbloed, A. I. Pyatak and V. L. Sizonenko, 'Elektronno-zvukovaya i dreifovaya neustoichivosti v plasme konechnogo davleniya s poperechnym tokom' ['Electron-acoustic and drift instabilities in a finite pressure plasma with a perpendicular current'], *Zh. Eksp. Teor. Fiz.* **64**, 2084–2096 (1973) [*Sov. Phys.–JETP* **37**, 1051–1056 (1973)].

16. J. P. Goedbloed, V. V. Nemov and A. A. Shishkin, 'Issledovanie neoklassicheskoi diffusii v toroidalnykh sistemakh s prostranstvennoi magnitnoi osyu' ['Neoclassical diffusion in a toroidal system with a three-dimensional magnetic axis'], *Zh. Tekh. Fiz.* **43**, 1609–1619 (1973) [*Sov. Phys. Tech. Phys.* **18**, 1016–1021 (1974)].

17. J. P. Goedbloed, 'Generalization of Suydam's criterion', *Phys. Fluids* **16**, 1927–1933 (1973).

18. J. P. Goedbloed and P. H. Sakanaka, 'A new approach to magnetohydrodynamic stability. I. A practical stability concept', *Phys. Fluids* **17**, 908–918 (1974).

19. P. H. Sakanaka and J. P. Goedbloed, 'A new approach to magnetohydrodynamic stability. II. Sigma-stable diffuse pinch configurations', *Phys. Fluids* **17**, 919–929 (1974).

20. J. P. Freidberg, J. P. Goedbloed and W. Grossman, F. A. Haas, 'Stability of kink modes in high-beta tokamaks', Proc. 5th Intern. IAEA Conf. on *Plasma Physics and Controlled Nuclear Fusion Research*, 11–15 Nov. 1974, Tokyo (IAEA, Vienna) Vol. **I**, 505 (1974).

21. J. P. Goedbloed and J. W. A. Zwart, 'On the dynamics of the screw pinch', *Plasma Physics* **17**, 45–67 (1975).

22. J. P. Goedbloed, 'Spectrum of ideal magnetohydrodynamics of axisymmetric toroidal systems', *Phys. Fluids* **18**, 1258–1268 (1975).

23. J. P. Freidberg and J. P. Goedbloed, 'Equilibrium and stability of a diffuse high-beta tokamak', in Proc. 3rd Topical Conf. on *Pulsed High Beta Plasmas* , 9–12 Sept. 1975, Culham, ed. D.E. Evans (Pergamon Press, Oxford) 117–121 (1976).

24. D. A. D'Ippolito, J. P. Freidberg, J. P. Goedbloed and J. Rem, 'Maximizing β in a tokamak with force-free currents', Proc. 6th Intern. IAEA Conf. on *Plasma Physics and Controlled Nuclear Fusion Research*, 6–13 Oct. 1976, Berchtesgaden (IAEA, Vienna) Vol. **I**, 523–537 (1977).

25. D. A. D'Ippolito, J. P. Freidberg, J. P. Goedbloed and J. Rem, 'High-beta tokamaks surrounded by force-free fields', Proc. 8th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 19–23 Sept. 1977, Prague, Vol. **I**, 68 (1977).

26. D. A. D'Ippolito, J. P. Freidberg, J. P. Goedbloed and J. Rem, 'High-beta tokamaks surrounded by force-free fields', *Phys. Fluids* **21**, 1600–1616 (1978).

27. J. P. Goedbloed, 'Magnetohydrodynamic instabilities in toroidal plasmas', Invited review in *Trends in Physics*, ed. M.M. Woolfson (Adam Hilger Ltd., Bristol) 324–335 (1978).

28. J. P. Goedbloed, *Lecture Notes on Ideal Magnetohydrodynamics*, Instituto de Física, Universidade Estadual de Campinas, Campinas, Brazil (1979).

29. J. P. Goedbloed, 'Free-boundary equilibrium of a high-β tokamak', Proc. 9th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 17–21 Sept. 1979, Oxford, Vol. **I** 171 (1979).

30. J. P. Goedbloed, 'Stabilization of magnetohydrodynamic instabilities by force-free magnetic fields. IV. The boundary conditions for a plasma-plasma interface', *Physica* **100C**, 273–275 (1980).

31. D. A. D'Ippolito and J. P. Goedbloed, 'Mode coupling in a toroidal sharp-boundary plasma. I. Weak-coupling limit', *Plasma Physics* **22**, 1091–1107 (1980).

32. J. P. Goedbloed and L. E. Zakharov, 'Helical equilibria of a plasma column with a diffuse current distribution', *Nucl. Fusion* **20**, 1515–1523 (1980).

33. R. M. O. Galvão, J. P. Goedbloed, J. Rem, J. M. Akkermans, C. Bobeldijk, E.J.M. van Heesch, J.A. Hoekzema, A.F.G. van der Meer, D. Oepts and A.A. Oomens, 'Studies in high-beta tokamaks and screw pinches', Proc. 8th Intern. IAEA Conf. on *Plasma Physics and Controlled Nuclear Fusion Research*, 1–10 July 1980, Brussels (IAEA,Vienna) Vol. **II**, 325–337 (1981).

34. J. P. Goedbloed, 'Stability of external kink modes at high beta', *Nucl. Fusion* **21**, 1316–1320 (1981).

35. J. M. Akkermans and J. P. Goedbloed, 'Tokamaks with a free boundary', Proc. 10th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 14–19 Sept. 1981, Moscow, Vol. **I**, 135 (1981).

36. J. P. Goedbloed, 'Conformal mapping methods in two-dimensional magnetohydrodynamics', Eur. Workshop on *Computational Models of the Behaviour of Mag netically-Confined Plasmas*, 9–11 Sept. 1981, Wildhaus, Switzerland; *Comp. Phys. Comm.* **24**, 311–321 (1981).

37. J. P. Goedbloed, 'Free-boundary problems in magnetohydrodynamics', in *Fusion Energy–1981, Selected Lectures presented at a Spring College on Fusion Energy*, June 1981, ICTP, Trieste (IAEA-SMR-82) 359–365 (1982).

38. J. P. Goedbloed, 'Free-boundary high-beta tokamaks. I. Free-boundary equilibrium', *Phys. Fluids* **25**, 852–868 (1982).

39. J. P. Goedbloed, 'Free-boundary high-beta tokamaks. II. Mathematical intermezzo: Hilbert transforms and conformal mapping', *Phys. Fluids* **25**, 2062–2072 (1982).

40. J. P. Goedbloed, 'Free-boundary high-beta tokamaks. III. Free-boundary stability', *Phys. Fluids* **25**, 2073–2088 (1982).

41. D. A. D'Ippolito and J. P. Goedbloed, 'Mode coupling in a toroidal sharp-boundary plasma, II. Strong coupling limit', *Plasma Physics* **25**, 537-550 (1983).

42. R. M. O. Galvão, J. P. Goedbloed, J. Rem, P. H. Sakanaka, T. J. Schep and M. Venema, 'Global kink and ballooning modes in high-beta systems and stability of toroidal drift modes', Proc. 9th Intern. IAEA Conf. on *Plasma Physics and Controlled Nuclear Fusion Research*, 1–8 Sept. 1982, Baltimore (IAEA, Vienna) Vol. **III**, 3–16 (1983).

43. J. P. Goedbloed, *Lecture Notes on Ideal Magnetohydrodynamics* (revision of the 1979 notes), Rijnhuizen Report 83-145 (1983, 2nd revision in 1988).

44. J. P. Goedbloed, J. P. Freidberg and R. Rohatgi, 'Influence of a limiter on the stability of external kink modes', Proc. 11th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 5–9 Sept. 1983, Aachen (EPS) Vol. **II**, 119–122 (1983).

45. J. Rem, R. M. O. Galvão, J. P. Goedbloed and P. H. Sakanaka, 'Ideal MHD stability of a tokamak in the high-beta tokamak ordering', Proc. 11th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 5–9 Sept. 1983, Aachen (EPS) Vol. **II**, 151–154 (1983).

46. J. P. Freidberg, J. P. Goedbloed and R. Rohatgi, 'Stabilization of external kink modes by means of a limiter', *Phys. Rev. Lett.* **51**, 2105–2108 (1983).

47. J. P. Goedbloed, 'Plasma-vacuum interface problems in magnetohydrodynamics', in *Fronts, Interfaces and Patterns*, eds. A.R. Bishop, L.J. Campbell and P.J. Channel, Invited review at the Third Annual International Conference of the Center for Nonlinear Studies, 3–6 May 1983, Los Alamos; *Physica* **12D**, 107–132 (1984).

48. J. P. Goedbloed, 'Some remarks on computing axisymmetric equilibria', *Comp. Phys. Comm.* **31**, 123–135 (1984); Erratum: *Comp. Phys. Comm.* **41**, 196 (1986).

49. R. M. O. Galvão and J. P. Goedbloed, 'Mercier criterion for high-beta tokamaks', Proc. 1984 Intern. Conf. on *Plasma Physics*, 27 June–3 July 1984, Lausanne (CRPP) Vol. **I**, 196 (1984).

50. J. P. Goedbloed, G. M. D. Hogeweij, R. Kleibergen and J. Rem, 'β-Optimization of tokamaks with the program HBT', Proc. 1984 Intern. Conf. on *Plasma Physics*, 27 June–3 July 1984, Lausanne (CRPP) Vol. **I**, 197 (1984).

51. J. P. Goedbloed, G. M. D. Hogewey, R. Kleibergen, J. Rem, R. M. O. Galvão and P. H. Sakanaka, 'Investigation of high-beta tokamak stability with the program HBT', Proc. 10th International IAEA Conference on *Plasma Physics and Controlled Fusion Research*, 12–19 Sept. 1984, London (IAEA, Vienna) Vol. **2**, 165–172 (1985).

52. J. P. Goedbloed, G. M. D. Hogeweij, R. Kleibergen, J. Rem, R. M. O. Galvão and P. H. Sakanaka, 'High-beta tokamak stability of toroidal plasmas with elliptical and D-shaped cross-sections', Proc. 12th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 2–6 Sept. 1985, Budapest (EPS) **I**, 54–57 (1985).

53. J. P. Goedbloed and P. H. Sakanaka, 'Orthogonal and conformal mapping with application to MHD equilibrium and stability calculations', Proc. 2nd Int. Workshop on *Mathematical Aspects of Fluid and Plasma Dynamics*, 24–28 June 1985, Paris-Orsay; *Transport Theory and Statistical Physics* **16**, 331–358 (1986).

54. J. P. Goedbloed, G. M. D. Hogeweij, R. Kleibergen, H. S. Lassing, J. Rem, R.M.O. Galvão and P.H. Sakanaka, 'Generalized conformal coordinates and profile studies with HBT', in *Computing in Plasma Physics*, Proc. 8th Europhysics Conf. on Computational Physics, 13–16 May 1986, Eibsee, Germany (EPS) 33–36 (1986).

55. J. Rem, H. S. Lassing and J. P. Goedbloed, 'The stability of a screw pinch plasma to global MHD modes', Proc. 14th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 22–26 June 1987, Madrid (EPS) Vol. **III**, 1055–1058 (1987).

56. R. Kleibergen and J. P. Goedbloed, 'Shear Alfvén spectrum of analytic high-β equilibria', Proc. 14th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 22– 26 June 1987, Madrid (EPS) Vol. **III**, 1091–1094 (1987).

57. J. P. Goedbloed and R. Kleibergen, J. Rem, 'Flux coordinate studies of elongated plasmas at high β', Proc. 14th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 22–26 June 1987, Madrid (EPS) Vol. **III**, 1095–1098 (1987).

58. R. Kleibergen and J. P. Goedbloed, 'On a class of analytic high-β tokamak equilibria', *Plasma Phys. Contr. Fusion* **30**, 339–342 (1988).

59. R. Kleibergen and J. P. Goedbloed, 'A high-beta tokamak equilibrium', *Plasma Phys. Contr. Fusion* **30**, 1939–1959 (1988).

60. R. Kleibergen and J. P. Goedbloed, 'Alfvén wave spectrum of an analytic high-beta tokamak equilibrium', *Plasma Phys. Contr. Fusion* **30**, 1961–1987 (1988).

61. J. P. Goedbloed and D. A. D'Ippolito, 'RF stabilization of external kink modes', Proc. 15th Eur. Conf. on *Controlled Fusion and Plasma Heating*, 16–20 May 1988, Dubrovnik (EPS) Vol. **II**, 799–802 (1988).

62. J. P. Goedbloed, M. Goossens and S. Poedts, 'Kink modes in coronal loops', Proc. *Joint Varenna–Abastumani Workshop on Plasma Astrophysics*, 24 Aug.–3 Sept. 1988, Varenna (ESA SP-205) Vol. **I**, 103 (1988).

63. D. A. D'Ippolito and J. P. Goedbloed, 'Quenching of external kink modes by localized radio-frequency fields', *Phys. Fluids* **B1**, 804–814 (1989).

64. G. T. A. Huysmans, R. M. O. Galvão, J. P. Goedbloed, E. Lazzaro and P. Smeulders, 'Ballooning stability of JET discharges', *Plasma Phys. Contr. Fusion* **31**, 2101–2110 (1989).

65. R. M. O. Galvão, J. P. Goedbloed, G. T. A. Huysmans, E. Lazzaro, J. O'Rourke, G. Schmidt and P. Smeulders, 'Ideal ballooning stability of JET discharges', Proc. 16th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 1–17 March 1989, Venice (EPS) **II**, 501–504 (1989).

66. J. P. Goedbloed and D. A. D'Ippolito, 'RF stabilization of external kink modes in the presence of a resistive wall', *Physics of Fluids* **B2**, 2366–2372 (1990).

67. J. P. Goedbloed, 'Stability of solar coronal loops', *Comput. Phys. Commun.* **59**, 39–53 (1990).

68. T. C. Hender, G. T. A. Huysmans, O. J. Kwon, J. P. Goedbloed, E. Lazzaro and D. P. O'Brien, 'Theoretical analysis of high-β JET shots', Proc. 17th Eur. Conf. on *Controlled Fusion and Plasma Heating*, 25–29 June 1990, Amsterdam (EPS) **I**, 399–402 (1990).

69. JET team, including J. P. Goedbloed, G. T. A. Huysmans, T. C. Hender and O. J. Kwon, 'High density regimes and beta limits in JET', Proc. 13th Intern. IAEA Conf. on *Plasma Physics and Controlled Nuclear Fusion Research*, 1–6 Oct. 1990, Washington (IAEA-Vienna, 1991) Vol. **1**, 219–227.

70. R. A. M. Van der Linden, M. Goossens and J. P. Goedbloed, 'On the existence of a thermal continuum in non-adiabatic magnetohydrodynamic spectra', *Phys. Fluids* **B3**, 866–868 (1991).

71. W. Kerner, S. Poedts, J. P. Goedbloed, G. T. A. Huysmans, B. Keegan and E. Schwarz, 'Computing the damping and destabilization of global Alfvén waves in tokamaks', Proc. 18th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 3–7 June 1991, Berlin (EPS) Vol. **IV**, 89–92 (1991).

72. J. P. Goedbloed, 'MHD waves in thermonuclear and solar plasmas', Invited review at Eighth General EPS Conf. on *Trends in Physics 1991*, 4–8 Sept. 1990, Amsterdam (EPS) **III**, 827–844 (1991).

73. G. T. A. Huysmans, J. P. Goedbloed and W. Kerner, 'Isoparametric bicubic Hermite elements for solution of the Grad–Shafranov equation', Proc. Europhysics 2nd Intern. Conf. on *Computational Physics*, 10–14 Sept. 1990, Amsterdam, ed. A. Tenner (World Scientific, Singapore, 1991) 371–376.

74. J. P. Goedbloed, G. Halberstadt and R. A. M. Van der Linden, 'On the photospheric boundary conditions of solar coronal loops', Proc. XVI General Assembly of the European Geophysical Society, 22–26 April 1991, Wiesbaden; *Annales Geophysicae, Suppl.* **9**, C561 (1991).

75. G. Halberstadt and J. P. Goedbloed, 'Coronal heating by resonant absorption in line- tied coronal loops', Proc. XVI General Assembly of the European Geophysical Society, 22–26 April 1991, Wiesbaden; *Annales Geophysicae, Suppl.* **9**, C299 (1991).

76. G. Halberstadt, J. P. Goedbloed, S. M. Poedts and R. A. M. Van der Linden, 'Line-tying effects on stability and heating of solar coronal loops', in Proc. Conf. on *Mechanisms of Chromospheric and Coronal Heating*, eds. P. Ulmschneider, E.R. Priest and R. Rosner (Springer, Heidelberg) 489–491 (1991).

77. G. T. A. Huysmans, T. C. Hender, O. J. Kwon, J. P. Goedbloed, E. Lazzaro and P. Smeulders, 'MHD stability analysis of high-β JET discharges', *Plasma Phys. Contr. Fusion* **34**, 487–499 (1992).

78. S. Poedts, W. Kerner, J. P. Goedbloed, B. Keegan, G. T. A. Huysmans and E. Schwarz, 'Damping of global Alfvén waves in tokamaks due to resonant absorption', *Plasma Phys. Contr. Fusion* **34**, 1397–1422 (1992).

79. G. T. A. Huysmans, H. J. de Blank, W. Kerner, J. P. Goedbloed and M. F. F. Nave, 'MHD stability of edge localized modes in JET discharges', Proc. 19th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 29 June–3 July 1992, Innsbruck (EPS) Vol. **I**, 247–250 (1992).

80. S. Poedts and J. P. Goedbloed, 'Coronal heating: the role of resonant absorption', Proc. SOHO Workshop on *Coronal streamers, coronal loops, and coronal and solar wind composition*, 25–28 Aug. 1992, Annapolis; (ESA SP-348) 253–256 (1992).

81. J. P. Goedbloed, G. T. A. Huysmans, S. Poedts, G. Halberstadt, W. Kerner and E. Schwarz, 'Computation of resistive MHD modes in thermonuclear and astrophysical plasmas', Invited review in *Advances in Simulation and Modeling of Thermonuclear Plasmas*, Proc. IAEA Technical Committee Meeting, 15–17 June 1992, Montréal; (IAEA, Vienna) 316–337 (1993).

82. G. T. A. Huysmans, J. P. Goedbloed and W. Kerner, 'Free boundary resistive modes in tokamaks', *Physics of Fluids* **B5**, 1545–1558 (1993).

83. G. Halberstadt and J. P. Goedbloed, 'Resonant heating of line-tied coronal loops', in *Physics of Solar and Stellar Coronae*, eds. J.F. Linsky and S. Serio (Kluwer, Dordrecht) 583–586 (1993).

84. G. Halberstadt and J. P. Goedbloed, 'The continuous Alfvén spectrum of line-tied coronal loops', *Astron. Astrophys.* **280**, 647–660 (1993).

85. J. P. Goedbloed, H. Holties, S. Poedts, G. T. A. Huysmans and W. Kerner, 'MHD spectroscopy: Free boundary modes (ELM's) and external excitation of TAE modes', *Plasma Phys. Contr. Fusion* **35**, B277–292 (1993).

86. G. T. A. Huysmans, H. Holties, W. Kerner, J. P. Goedbloed, D. Borba and F. Porcelli, 'MHD spectroscopy: Modelling the excitation of TAE modes by an external antenna', Proc. 20th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 26–30 July 1993, Lisbon (EPS) Vol. **I**, 187–190 (1993).

87. J. P. Goedbloed and G. Halberstadt, 'Magnetohydrodynamic waves in coronal flux tubes', *Astron. Astrophys.* **286**, 275–301 (1994).

88. W. Kerner, D. Borba, G. T. A. Huysmans, F. Porcelli, S. Poedts, J. P. Goedbloed and R. Betti, 'Stability of global Alfvén waves (TAE, EAE) in JET tritium discharges', *Plasma Phys. Contr. Fusion* **36**, 911–923 (1994).

89. S. Poedts, A. J. C. Beliën and J. P. Goedbloed, 'On the quality of resonance absorption as a coronal loop heating mechanism', *Solar Physics* **151**, 271–304 (1994).

90. S. Poedts and J. P. Goedbloed, '3D nonlinear wave heating of coronal loops', *Space Science Reviews* **68**, 103–108 (1994).

91. J. P. Goedbloed and G. Halberstadt, 'MHD waves in coronal flux tubes', *Space Science Reviews* **68**, 121–124 (1994).

92. R. A. M. Van der Linden, A. W. Hood and J. P. Goedbloed, 'The influence of line-tying on coronal perturbations in a gravitationally stratified equilibrium', *Solar Physics* **154**, 69–96 (1994).

93. S. Poedts and J. P. Goedbloed, 'Nonlinear wave heating of the solar corona', in *Solar Magnetic Fields*, ed. M. Schüssler and W. Schmidt (Cambridge University Press) 396–398 (1994).

94. J. P. Goedbloed, S. Poedts, G. T. A. Huysmans, G. Halberstadt, H. A. Holties and A. J. C. Beliën, 'Magnetohydrodynamic spectroscopy: Large scale computation of the spectrum of waves in plasmas', *Future Generation Computer Systems* **10**, 339–343 (1994).

95. S. Poedts, P. M. Meijer, J. P. Goedbloed, H. A. van der Vorst and A. Jakoby, 'Parallel magnetohydrodynamics on the CM-5', in *High Performance Computing and Networking*, Proc. HPCN Europe 1994, 18–20 April 1994, Munich, *Lecture Notes in Computer Science*, eds. W. Gentsch and U. Harms (Springer) 365–370 (1994).

96. H. A. Holties, G. T. A. Huysmans, W. Kerner, J. P. Goedbloed, F. X. Söldner and V. V. Parail, 'MHD stability of advanced tokamak scenarios', Proc. 21th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 27 June–1 July 1994, Montpellier (EPS) Vol. **I**, 234–237 (1994).

97. F. X. Söldner, Y. Baranov, V. P. Bhatnagar, A. J. Bickley, C. D. Challis, J. P. Goedbloed, B. Fischer, C. Gormezano, H. A. Holties, G. T. A. Huysmans, W. Kerner, V. V. Parail, G. V. Pereverzev, F. Rimini, A. C. C. Sips, E. Springmann and A. Taroni, 'A stable route to high-β_p plasmas with non-monotonic q-profiles', Proc. 21th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 27 June–1 July 1994, Montpellier (EPS) Vol. **III**, 1126–1129 (1994).

98. H. A. Holties, G. T. A. Huysmans, J. P. Goedbloed, W. Kerner, F. X. Söldner and V. V. Parail, 'Stability of MHD modes in plasmas with inverted q-profiles', Proc. *Joint Varenna–Lausanne Int. Workshop on Theory of Fusion Plasmas*, Varenna, 22–26 Aug., 1994, 295 (1994).

99. P. M. Meijer, S. Poedts, J. P. Goedbloed and A. Jakoby, 'Nonlinear magnetohydrodynamics on parallel computers', Proc. 6th Joint EPS–APS International Conference on *Physics Computing*, 22–26 Aug. 1994, Lugano, eds. R. Gruber, M. Tomassini (EPS) 621–624 (1994).

100. M. N. Rosenbluth, J. Hogan, D. Boucher, A. Bondeson, P. Barabaschi, B. Coppi, L. Degtyarev, S. W. Haney, J. P. Goedbloed, T. C. Hender, H. A. Holties, G. T. A. Huysmans, W. Kerner, J. Manickam, A. A. Martynov, S. Medvedev, D. A. Monticello, T. Ozeki, L. D. Pearlstein, F. Perkins, A. Pletzer, F. Porcelli, P. H. Rebut, S. Tokuda, A. D. Turnbull, L. Villard, J. Wesley, ITER Joint Central Team and ITER Home Teams, 'ITER plasma modelling and MHD stability limits', *Plasma*

Physics and Controlled Nuclear Fusion Research, 26 Sept.–1 Oct. 1994, Seville, Spain; (IAEA, Vienna) Vol. **2**, 517–524 (1995).

101. M. N. Kooper, H. A. van der Vorst, S. Poedts and J. P. Goedbloed, 'Application of the implicitly updated Arnoldi method with complex shift and invert strategy in MHD', *Journal of Comp. Phys.* **118**, 320–328 (1995).

102. P. M. Meijer, S. Poedts, J. P. Goedbloed and A. Jakoby, 'A parallel semi-implicit method for 3D nonlinear magnetohydrodynamics', in *High Performance Computing and Networking*, Proc. HPCN Europe 1995, 3–5 May 1995, Milano; *Lecture Notes in Computer Science* **919**, ed. B. Hertzberger and G. Serazzi (Springer) 170–175 (1995).

103. G. T. A. Huysmans, W. Kerner, D. Borba, H. A. Holties and J. P. Goedbloed, 'Modeling the excitation of global Alfvén modes by an external antenna in the Joint European Tokamak', *Physics of Plasmas* **2**, 1605–1613 (1995).

104. J. P. Goedbloed and A. Lifschitz, 'Comment on "Symmetry analysis of the nonlinear MHD equations" by Junling Wu', *Phys. Lett. A* **198**, 467–468 (1995).

105. A. De Ploey, R. A. M. Van der Linden, G. T. A. Huysmans, M. Goossens, W. Kerner and J. P. Goedbloed, 'MARFEs: A magnetohydrodynamic stability study of general tokamak equilibria', Proc. 22th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 3–7 July 1995, Bournemouth (EPS) Vol. **I**, 221–224 (1995).

106. H. A. Holties, A. Fasoli, J. P. Goedbloed, G. T. A. Huysmans, W. Kerner, S. Sharapov and W. Zwingmann, 'MHD spectroscopy, First application of a new diagnostic tool', Proc. 22th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 3–7 July 1995, Bournemouth (EPS) Vol. **IV**, 85–88 (1995).

107. F. X. Söldner, B. Balet, Y. Barano, A. Ekedahl, B. Fischer, J. P. Goedbloed, C. Gormezano, H. A. Holties, G. T. A. Huysmans, M. Lennholm, V.V. Parail, F. Rimini, P. Schild, A. C. C. Sips, F. Smits, E. Springmann, A. Taroni and B. J. D. Tubbing, 'Shear reversal experiments on JET', Proc. 22th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 3–7 July 1995, Bournemouth (EPS) Vol. **IV**, 113–116 (1995).

108. J. P. Goedbloed and A. Lifschitz, 'Comment on "Alfvén resonance reconsidered" by P. M. Bellan', *Physics of Plasmas* **2**, 3550–3551 (1995).

109. G. Halberstadt and J. P. Goedbloed, 'Alfvén wave heating of coronal loops: photospheric excitation', *Astron. Astrophys.* **301**, 559–576 (1995).

110. G. Halberstadt and J. P. Goedbloed, 'Alfvén heating of line-tied coronal loops. Surface excitation revisited', *Astron. Astrophys.* **301**, 577–592 (1995).

111. J. P. Goedbloed, 'Magnetohydrodynamic waves in fusion and astrophysical plasmas', Invited review at *Intern. Conf. on Plasma Physics*, 31 Oct.–4 Nov. 1994, Foz do Iguaçu, Brasil, *AIP Conference Proceedings (Am. Inst. Physics)* **345**, 465–476 (1995).

112. A. J. C. Beliën, S. Poedts and J. P. Goedbloed, 'Magnetohydrodynamic continua and Stratification induced Alfvén Eigenmodes', *Phys. Rev. Lett.* **76**, 567–570 (1996).

113. A. J. C. Beliën, S. Poedts and J. P. Goedbloed, 'Calculation of soft x-ray images from MHD simulations of heating of coronal loops', Proc. IAU Coll. **153** on *Magnetodynamic Phenomena in the Solar Atmosphere – Prototypes of stellar magnetic activity*, 22–26 May 1995,Tokio, eds. Y. Uchida, T. Kosugi and H.S. Hudson (Kluwer Academic Publishers, Dordrecht) 423–424 (1996).

114. S. Poedts and J. P. Goedbloed, '2D and 3D nonlinear MHD simulations of coronal loop heating by Alfvén waves', Proc. IAU Coll. **153** on *Magnetodynamic Phenomena in the Solar Atmosphere – Prototypes of stellar magnetic activity*, 22–26 May 1995,Tokio, eds. Y. Uchida, T. Kosugi and H.S. Hudson (Kluwer Academic Publishers, Dordrecht) 425–426 (1996).

115. J. P. Goedbloed and A. Lifschitz, 'Symmetry of magnetohydrodynamic flows', *Astrophysics Letters and Communications* **36**, 261–267 (1996).

116. P. M. Meijer, S. Poedts and J. P. Goedbloed, 'Parallel magnetohydrodynamics on the Cray T3D', *Future Generation Computer Systems* **12**, 307–323 (1996).

117. J. P. Goedbloed, 'Plasma equilibrium in tokamaks', *Transactions of Fusion Technology* **29**, 31–36 (1996).

118. J. P. Goedbloed, '"Derivation" of the MHD equations', *Transactions of Fusion Technology* **29**, 105–110 (1996).

119. J. P. Goedbloed, 'Introduction to MHD instabilities', *Transactions of Fusion Technology* **29**, 111–120 (1996).

120. J. P. Goedbloed, 'Toroidal theory of MHD instabilities', *Transactions of Fusion Technology* **29**, 121–132 (1996).

121. H. A. Holties, G. T. A. Huysmans, J. P. Goedbloed, W. Kerner, V. V. Parail and F. X. Söldner, 'Stability of infernal and ballooning modes in advanced tokamak scenarios', *Nucl. Fusion* **36**, 973–986 (1996).

122. H. A. Holties, A. Fasoli, J. P. Goedbloed, G. T. A. Huysmans, W. Kerner and S. Sharapov, 'Profile dependent signature of the linear MHD spectrum', Proc. 23th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 24–28 June 1996, Kiev (EPS) Vol. **I**, 347–350 (1996).

123. S. Poedts, A. De Ploey, J. P. Goedbloed, J.M. Han, B. G. Hong and S. K. Kim, 'MHD stability analysis of the KT-2 tokamak plasma', Proc. 23th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 24–28 June 1996, Kiev (EPS) Vol. **I**, 351–354 (1996).

124. A. J. C. Beliën, S. Poedts, H. J. W. Spoelder, R. Leenders and J. P. Goedbloed, 'Visualization of resonant absorption in solar coronal loops by simulation of soft X-ray images', *Computers in Physics* **10**, 573–583 (1996).

125. H. A. Holties, A. Fasoli, J. P. Goedbloed, G. T. A. Huysmans and W. Kerner, 'Determination of local tokamak parameters by magnetohydrodynamic spectroscopy', *Phys. Plasmas* **4**, 709–719 (1997).

126. H. A. Holties, J. P. Goedbloed, G. T. A. Huysmans and W. Kerner, 'Dependence of the MHD spectrum on the safety factor profile', *Plasma Phys. Contr. Fusion* **39**, 73–82 (1997).

127. J. P. Goedbloed and A. Lifschitz, 'Stationary symmetric magnetohydrodynamic flows', *Phys. Plasmas* **4**, 3544–3564 (1997).

128. A. Lifschitz and J. P. Goedbloed, 'Transonic magnetohydrodynamic flows', *J. Plasma Phys.* **58**, 61–99 (1997).

129. R. Keppens, S. Poedts, P. M. Meijer and J. P. Goedbloed, 'A data parallel pseudo-spectral semi-implicit magnetohydrodynamics code', in Proc. HPCN Europe 1997 on *High Performance Computing and Networking*, 28–30 April 1997, Vienna; *Lecture Notes in Computer Science* **1225**, eds. B. Hertzberger and P. Sloot (Springer) 190–199 (1997).

130. A. De Ploey, R. A. M. Van der Linden, G. T. A. Huysmans, M. Goossens, W. Kerner and J. P. Goedbloed, 'Marfes: A magnetohydrodynamic stability study of two-dimensional tokamak equilibria', *Plasma Phys. Contr. Fusion* **39**, 423–438 (1997).

131. A. J. C. Beliën, S. Poedts and J. P. Goedbloed, 'Continuous magnetohydrodynamic spectra of two-dimensional coronal magnetostatic flux tubes', *Astron. Astrophys.* **322**, 995–1006 (1997).

132. J. R. Myra, D. A. D'Ippolito and J. P. Goedbloed, 'Generalised ballooning and sheath instabilities in the scrape-off layer of divertor tokamaks', *Phys. Plasmas* **4**, 1330–1341 (1997).

133. S. Poedts and J. P. Goedbloed, 'Nonlinear wave heating of solar coronal loops', *Astron. Astrophys.* **321**, 935–944 (1997).

134. S. Poedts, G. Tóth, A. J. C. Beliën and J. P. Goedbloed, 'Nonlinear MHD simulations of wave dissipation in flux tubes', *Solar Physics* **172**, 45–52 (1997).

135. R. J. Nijboer, A.E. Lifschitz and J. P. Goedbloed, 'Spectrum and stability of a rigidly rotating compressible plasma', *J. Plasma Phys.* **58**, 101–121 (1997).

136. A. J. C. Beliën, S. Poedts and J. P. Goedbloed, 'Two-dimensional equilibrium in coronal magnetostatic flux tubes: An accurate equilibrium solver', *Comp. Phys. Comm.* **106**, 21–38 (1997).

137. R. J. Nijboer, B. van der Holst, S. Poedts and J. P. Goedbloed, 'Calculating magnetohydrodynamic flow spectra', *Comp. Phys. Comm.* **106**, 39–52 (1997).

138. A. J. C. Beliën, B. van der Holst, J. P. Goedbloed, B. G. Hong and S. K. Kim, 'Magnetohydrodynamic stability analysis of negative shear plasmas in the KSTAR tokamak', Proc. 24th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 9–13 June 1997, Berchtesgaden (EPS) Vol. **II**, 601–604 (1997).

139. J. P. Goedbloed, R. J. Nijboer and A. Lifschitz, 'Transonic MHD flows: Stationary states and spectrum', Proc. 24th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 9–13 June 1997, Berchtesgaden (EPS) Vol. **II**, 613–616 (1997).

140. A. J. C. Beliën, S. Poedts and J. P. Goedbloed, 'Slow magnetosonic waves and instabilities in expanded flux tubes anchored in chromospheric / photospheric regions', in *The Corona and Solar Wind near Minimum Activity*, Proc. Fifth SOHO Workshop, 17–20 June 1997, Oslo (ESA SP-404) 193–197 (1997).

141. J. P. Goedbloed, A. Lifschitz, 'Critical issues in transonic magnetohydrodynamic flows', in *The Corona and Solar Wind near Minimum Activity*, Proc. Fifth SOHO Workshop, 17–20 June 1997, Oslo (ESA SP-404) 417–420 (1997).

142. W. Kerner, J. P. Goedbloed, G. T. A. Huysmans, S. Poedts and E. Schwarz, 'CASTOR: Normal-mode analysis of resistive MHD plasmas', *J. Comp. Phys.* **142**, 271–303 (1998).

143. H. De Sterck, S. Poedts and J. P. Goedbloed, 'Dynamics of hot filaments in a tokamak plasma', *J. Plasma Phys.* **59**, 277–302 (1998).

144. J. P. Goedbloed, 'Plasma equilibrium in tokamaks'; '"Derivation" of the MHD equations'; 'Introduction to MHD instabilities'; 'Toroidal theory of MHD instabilities', *Transactions of Fusion Technology* **33**, 84–89; 99–104; 105–114; 115–126 (1998).

145. R. Keppens, S. Poedts and J. P. Goedbloed, 'Data parallel simulations of the magnetohydrodynamics of plasma loops', Proc. HPCN Europe on *High Performance Computing and Networking*, 21–23 April 1998, Amsterdam; *Lecture Notes in Computer Science* **1401**, eds. P. Sloot, M. Bubak and B. Hertzberger (Springer) 233–241 (1998).

146. R. J. Nijboer, J. P. Goedbloed and A.E. Lifschitz, 'The spectrum of MHD flows about X-points', *J. Plasma Phys.* **60**, 421–446 (1998).

147. R. J. Nijboer and J. P. Goedbloed, 'The spectrum of two-dimensional incompressible magnetohydrodynamic flows', Proc. 25th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 29 June–3 July 1998, Prague (EPS) 1919–1922 (1998).

148. J. P. Goedbloed, R. Keppens and A.E. Lifschitz, 'Axisymmetric transonic MHD flows', Proc. 25th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 29 June–3 July 1998, Prague (EPS) 1118–1121 (1998).

149. B. van der Holst, A. J. C. Beliën, J. P. Goedbloed, M. Nool and A. van der Ploeg, 'Calculation of resistitive magnetohydrodynamic spectra in tokamaks', Proc. 25th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 29 June–3 July 1998, Prague (EPS) 1868–1871 (1998).

150. J. P. Goedbloed, 'Once more: The continuous spectrum of ideal magnetohydrodynamics', *Phys. Plasmas* **5**, 3143–3154 (1998).

151. R. Keppens, G. Tóth, R. H. J. Westermann and J. P. Goedbloed, 'Growth and saturation of the Kelvin–Helmholtz instability with parallel and anti-parallel magnetic fields', *J. Plasma Phys.* **61**, 1–19 (1999).

152. B. van der Holst, R. J. Nijboer and J. P. Goedbloed, 'Magnetohydrodynamic spectrum of gravitating plane plasmas with flow', *J. Plasma Phys.* **61**, 221–240 (1999).

153. R. J. Nijboer and J. P. Goedbloed, 'Mode coupling in two-dimensional magnetohydrodynamic flows', *J. Plasma Phys.* **61**, 241–262 (1999).

154. B. van der Holst, A. J. C. Beliën, J. P. Goedbloed, M. Nool and A. van der Ploeg, 'Calculation of resistive magnetohydrodynamic spectra in tokamaks', *Phys. Plasmas* **6**, 1554–1561 (1999).

155. R. Keppens, J. P. Goedbloed, 'Numerical simulations of stellar winds', Proc. 7th SOHO Workshop on *Coronal Holes and Solar Wind Acceleration*, 28 Sept.–1 Oct. 1998, Northeast Harbor, Maine, USA; *Space Science Reviews* **87**, 223–226 (1999).

156. S. Poedts, A. De Ploey, J. P. Goedbloed, B. G. Hong and S. K. Kim, 'Magnetohydrodynamics stability analysis of the KT-2 tokamak plasma', *Fusion Technology* **35**, 18–31 (1999).

157. R. Keppens and J. P. Goedbloed, 'Numerical simulations of stellar winds: polytropic models', *Astron. Astrophys.* **343**, 251–260 (1999).

158. R. Keppens, G. Tóth and J. P. Goedbloed, 'Nonlinear dynamics of Kelvin–Helmholtz unstable magnetized jets', Proc. 26th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 14–18 June 1999, Maastricht, eds. B. Schweer, G. van Oost and E. Vietzke, Volume **23J**, 797-800 (1999).

159. R. Keppens and J. P. Goedbloed, 'Stationary and time-dependent MHD simulations of the solar wind', Proc. 9th European Meeting on Solar Physics, *Magnetic Fields and Solar Processes*, 12–18 Sept. 1999, Florence (ESA SP-448) 1177–1180 (1999).

160. R. Keppens, G. Tóth and J. P. Goedbloed, 'Parallel computational magneto-fluid dynamics', Proc. Int. Conf. on *Pallallel Computing: Fundamentals and Applications*, 17–20 Aug. 1999, Delft, eds. E.H. D'Hollander, G.R. Joubert, F.J. Peters and H.J. Sips (Imperial College Press, London) 160–167 (2000).

161. R. Keppens and J. P. Goedbloed, 'Stellar winds, dead zones, and coronal mass ejections', *Astrophys. J.* **530**, 1036–1048 (2000).

162. J. P. Goedbloed, 'Expansion functions for two-dimensional incompressible fluid flow in arbitrary domains', *J. Comp. Phys.* **160**, 283–297 (2000).

163. B. van der Holst, A. J. C. Beliën and J. P. Goedbloed, 'New Alfvén continuum gaps and global modes induced by toroidal flow', *Phys. Rev. Lett.* **84**, 2865–2868 (2000).

164. J. P. Goedbloed, 'Plasma equilibrium in tokamaks'; 'Introduction to MHD instabilities'; 'Toroidal theory of MHD instabilities', *Transactions of Fusion Technology* **37**, 79–84; 207–216; 217–226 (2000).

165. R. Keppens, M. Nool, P. Zegeling and J. P. Goedbloed, 'Dynamic grid adaptation for computational magnetohydrodynamics', Proc. HPCN Europe on *High Performance Computing and Networking*, 8–10 May 2000, Amsterdam; *Lecture Notes in Computer Science* **1823**, eds. M. Bubak, H. Afsarmanesh, R. Williams and B. Hertzberger (Springer) 61–70 (2000).

166. A. J. C. Beliën, B. van der Holst, M. Nool, A. van der Ploeg and J. P. Goedbloed, 'Application of the Jacobi-Davidson method to spectral calculations in magnetohydrodynamics', Proc. HPCN Europe on *High Performance Computing and Networking*, 8–10 May 2000, Amsterdam; *Lecture Notes in Computer Science* **1823**, eds. M. Bubak, H. Afsarmanesh, R. Williams and B. Hertzberger (Springer) 119–126 (2000).

167. B. van der Holst, A. J. C. Beliën and J. P. Goedbloed, 'Low frequency Alfvén waves induced by toroidal flows', *Phys. Plasmas* **7**, 4208–4222 (2000).

168. J. P. Goedbloed, 'Magnetohydrodynamic waves in laboratory and astrophysical plasmas', Conference on *Waves in Dusty, Solar and Space Plasmas*, 22–26 May 2000, Leuven, ed. Frank Verheest; *AIP Conference Proceedings (Am. Inst. Phys.)* **537**, 109–118 (2000).

169. J. P. Goedbloed, A. J. C. Beliën, B. van der Holst and R. Keppens, 'Plasma rotation: Transition from linear to nonlinear dynamics', Proc. 27th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 12–16 June 2000, Budapest, eds. K.Szegö, T.N. Todd and S. Zoletnik, OR.011 (2000).

170. A. J. C. Beliën, J. P. Goedbloed and B. van der Holst, 'Axisymmetic plasma equilibria with flow: a new solver', Proc. 27th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 12–16 June 2000, Budapest, eds. K.Szegö, T.N. Todd and S. Zoletnik, P3.007 (2000).

171. B. van der Holst, A. J. C. Beliën and J. P. Goedbloed, 'New Alfvén continuum gaps and global modes induced by toroidal flow', Proc. 27th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 12–16 June 2000, Budapest, eds. K. Szegö, T.N. Todd and S. Zoletnik, P3.076 (2000).

172. A. J. C. Beliën, B. van der Holst, M. Nool, A. van der Ploeg and J. P. Goedbloed, 'Spectral calculations in magnetohydrodynamics using the Jacobi–Davidson method', *Future Generation Computer Systems* **17**, 919–924 (2001).

173. A. J. C. Beliën, M. A. Botchev, J. P. Goedbloed, B. van der Holst and R. Keppens, 'Influence of poloidal flow on TAE modes', Proc. 28th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 18–22 June 2001, Madeira,1077 (2001).

174. A. J. C. Beliën, J. P. Goedbloed and B. van der Holst, 'MHD waves and instabilities in accretion discs', Proc. 28th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 18–22 June 2001, Madeira, 1309 (2001).

175. J. P. Goedbloed, 'Transonic magnetohydrodynamic flows in laboratory and astrophysical plasmas', International Topical Conference on Plasma Physics, *New Plasma Horizons*, 3–7 Sept. 2001, ed. Lennart Stenflo; *Physica Scripta* **T98**, 43–47 (2002).

176. J. P. Goedbloed, 'Plasma equilibrium in tokamaks'; 'Introduction to MHD instabilities'; 'Toroidal theory of MHD instabilities', *Transactions of Fusion Science and Technology* **41**, 71–76; 85–94; 95–106 (2002).

177. R. Keppens, M. Nool and J. P. Goedbloed, 'Zooming in on 3D magnetized plasmas with grid-adaptive simulations', *Pallallel Computational Fluid Dynamics – Practice and Theory*, 21–23 May 2001, eds. P. Wilders, A. Ecer, N. Satofuka and P. Fox (Elsevier Science) 215–222 (2002).

178. A. J. C. Beliën, M. A. Botchev, J. P. Goedbloed, B. van der Holst and R. Keppens, 'New numerical tools to study waves and instabilities of flowing plasmas', *Comp. Phys. Comm.* **147**, 497–500 (2002).

179. R. Keppens, F. Casse and J. P. Goedbloed, 'Waves and instabilities in accretion disks: Magnetohydrodynamic spectroscopic analysis', *Astrophys. J.* **569**, L121–L126 (2002).

180. A. J. C. Beliën, M. A. Botchev, J. P. Goedbloed, B. van der Holst and R. Keppens, 'FINESSE: Axisymmetric MHD equilibria with flow', *J. Comp. Phys.* **182**, 91–117 (2002).

181. J. P. Goedbloed, A. J. C. Beliën and B. van der Holst, 'Analogies of rapidly rotating tokamaks and accretion disks', International Congress on *Plasmas Physics*, 15-16 July 2002, Sydney, eds. I.S. Falconer, R.L. Dewar and J. Khachan; *AIP Conference Proceedings (Am. Inst. Physics)* **669**, 642–645 (2003).

182. J. P. Goedbloed, R. Keppens and S. Poedts, 'Computer simulations of solar plasmas', Proc. WISER HPC2002 on *Advances in Space Environment Research*, 29 July–2 Aug. 2002, Adelaide, Vol. I, ed. A.C.-L. Chian (Kluwer Academic Publishers, Dordrecht, 2003); *Space Science Reviews* **107**, 63–80 (2003).

183. J. P. Goedbloed, 'Stability and waves of transonic laboratory and space plasmas', Proc. WISEF2002 on *Advances in Space Environment Research*, 22–26 July 2002, Adelaide, Vol. I, ed. A.C.-L. Chian (Kluwer Academic Publishers, Dordrecht, 2003); *Space Science Reviews* **107**, 353–360 (2003).

184. R. Keppens, M. Nool, Tóth and J. P. Goedbloed, 'Adaptive Mesh Refinement for conservative systems: multi-dimensional efficiency evaluation', *Comp. Phys. Comm.* **153**, 317–339 (2003).

185. C. Wang, R. Keppens and J. P. Goedbloed, 'MHD stability analysis of a slow capilary discharge', *J. Phys. D: Appl. Phys.* **36**, 2255–2261 (2003).

186. Yu. Zaliznyak, R. Keppens and J. P. Goedbloed, 'Three-dimensional instability of a magnetized wake flow embedded in the current sheet', Proc. 30th Eur. Conf. on *Controlled Fusion and Plasma Physics*, 7–11 July 2006, St. Petersburg, P1.43 (2003).

187. Yu. Zaliznyak, R. Keppens and J. P. Goedbloed, 'Three-dimensional MHD simulations of in-situ shock formation in the coronal streamer belt', *Phys. Plasmas* **10**, 4478–4488 (2003).

188. J. P. Goedbloed, A. J. C. Beliën, B. van der Holst and R. Keppens, 'Unstable continuous spectra of transonic axisymmetric plasmas', *Phys. Plasmas* **11**, 28–54 (2004).

189. J. P. Goedbloed, 'Transonic instabilities in laboratory and astrophysical plasmas', Int. Topical Conference on Plasma Physics, *Complex Plasmas in the New Milennium*, 8–12 Sept. 2003, Santorini, ed. Lennart Stenflo; *Physica Scripta* **T107** 159–162 (2004).

190. J. P. Goedbloed, A. J. C. Beliën, B. van der Holst and R. Keppens, 'Transonic instabilities in laboratory and astrophysical plasmas', Symposium on *Plasmas in the Laboratory and in the Universe*, 16–19 Sept. 2003, Como, eds. G. Bertin, D. Farina and R. Pozzoli; *AIP Conference Proceedings* **703** (Melville, 2004) 42–47.

191. J. P. Goedbloed and S. Poedts, *Principles of Magnetohydrodynamics; with Applications to Laboratory and Astrophysical Plasmas* (Cambridge, Cambridge University Press, 2004); ISBN 0521-62347-2 (HB), 0521-62607-2 (PB).

192. C. Wang, J. W. S. Blokland, R. Keppens and J. P. Goedbloed, 'Local analysis of MHD spectra for cylindrical plasmas with flows', *J. Plasma Phys.* **70**, 651–669 (2004).

193. J. P. Goedbloed, A. J. C. Beliën, B. van der Holst and R. Keppens, 'No additional flow continua in magnetohydrodynamics', *Phys. Plasmas* **11**, 4332–4340 (2004).

194. J. P. Goedbloed, 'Variational principles for stationary one- and two-fluid equilibria of axisymmetric laboratory and astrophysical plasmas', *Phys. Plasmas*, **11**, L81–L84 (2004).

195. J. P. Goedbloed, 'Plasma equilibrium in tokamaks'; 'Introduction to MHD instabilities'; 'Toroidal theory of MHD instabilities', *Transactions of Fusion Science and Technology* **45**, 79–84; 85–94; 95–106 (2004).

196. J. P. Goedbloed and R. Keppens, 'Transonic instabilities in accretion disks', E-Proc. Int. Congress on *Plasma Physics*, Nice, 25–29 Oct. 2004, http://hal.ccsd.cnrs.fr/ccsd-00001817 (2004) [also http://fr.archiv.org/abs/physics/ 0411180 (2004)].

197. J. W. S. Blokland, E. van der Swaluw, R. Keppens and J. P. Goedbloed, 'Magneto-rotational overstability in accretion disks', *Astron. Astrophys.* **444**, 337–346 (2005).

198. J. P. Goedbloed, 'Response to "Comment on 'Variational principles for stationary one- and two-fluid equilibria of axisymmetric laboratory and astrophysical plasmas'" [*Phys. Plasmas* **12**, 064701 (2005)]', *Phys. Plasmas* **12**, 064702–4 (2005).

199. J. P. Goedbloed and R. Keppens, 'MHD spectroscopy of transonic flows', Proc. WISER HPC2005 on *Advances in Space Environment Research*, 18–22 April 2005,

Leuven, ed. A.C.-L. Chian, M. Goossens, S. Poedts and Y. Voitenko (Kluwer Academic Publishers, Dordrecht, 2006); *Space Science Reviews* **121**, 55–63 (2005).

200. J. P. Goedbloed, 'Transonic flows in two-fluid plasmas', Proc. WISEF2005 on *Advances in Space Environment Research*, 2–6 May 2005, Graz, ed. A.C.-L. Chian, M. Leubner and W. Baumjohann (Kluwer Academic Publishers, Dordrecht, 2006); *Space Science Reviews*, **122**, 239–246 (2006).

201. C. Wang, R. Keppens and J. P. Goedbloed, 'Magnetohydrodynamic simulation of two capillary discharge channels', *J. Plasma Phys.* **72**, 491–506 (2006).

202. D.H. Nickeler, J. P. Goedbloed and H.-J. Fahr, 'Stationary field aligned MHD flows at astropauses and in astrotails', *Astron. Astrophys.*, **454**, 797–810 (2006).

203. J. P. Goedbloed, 'Magnetohydrodynamic spectral theory of laboratory and astrophysical plasmas', in *Fith International Conference on Mathematical Methods in Physics*, 24–28 April 2006, Rio de Janeiro, PoS(IC2006)017 (2006).

204. J. W. S. Blokland, B. van der Holst, R. Keppens and J. P. Goedbloed, 'PHOENIX: MHD spectra of rotating laboratory and astrophysical plasmas', *33rd Eur. Conf. on Controlled Fusion and Plasma Physics*, 19–23 June 2006, Rome, P5.052 (2006).

205. J. P. Goedbloed, J. W. S. Blokland, R. Keppens and K.M. Schure, 'Connection of interchange instabilities in tokamaks and Parker instabilities in spiral arms of galaxies', Proc. 33rd Eur. Conf. on *Controlled Fusion and Plasma Physics*, 19–23 June 2006, Rome, O4.021 (2006).

206. J. P. Goedbloed, 'Alternatives and paradoxes in rotational and gravitational instabilities', in Proc. International Workshop on *Collective Phenomena in Macroscopic Systems*, 4–6 December 2006, Como, ed. G. Bertin, R. Pozzoli, and K.R. Sreenivasan, 127–136 (World Scientific, Singapore, 2007).

207. J. W. S. Blokland, B. van der Holst, R. Keppens and J. P. Goedbloed, 'PHOENIX: MHD spectral code for rotating laboratory and gravitating astrophysical plasmas', *J. Comp. Phys.*, **226**, 509–533 (2007).

208. J. W. S. Blokland, R. Keppens and J. P. Goedbloed, 'Unstable Magnetohydrodynamical continuous spectrum of accretion disks; A new route to magnetohydrodynamical turbulence in accretion disks', *Astron. Astrophys.*, **467**, 21–35 (2007). [astro-ph/0703581]

209. J. W. S. Blokland, R. Keppens and J. P. Goedbloed, 'Unstable magnetohydrodynamical continuous spectrum of accretion disks', *34rd Eur. Conf. on Controlled Fusion and Plasma Physics*, 2–6 July 2007, Warsaw, O-5.011 (2007).

210. J. P. Goedbloed, 'Time reversal duality of magnetohydrodynamical shocks', *Phys. Plasmas* **15**, 062101, 1–19 (2008).

211. J. P. Goedbloed, 'New approach to magnetohydrodynamic shocks: duality under time reversal', *50th Annual Meeting of the APS Division of Plasma Physics*, 17–21 November 2008, Dallas, BO3.00010 (2008).

212. C. Wang and J. P. Goedbloed, 'Magnetically tapered plasma channels for laser wakefield accelerators', *J. Phys. D: Appl. Phys.* **41**, 085203, 1–9 (2008).

213. J. P. Goedbloed, 'New approach to MHD spectral theory of stationary plasma flows', *51st Annual Meeting of the APS Division of Plasma Physics*, 17–21 November 2009, Atlanta, UO6.00003 (2009).

214. J. P. Goedbloed, 'New construction of the magnetohydrodynamic spectrum of stationary plasma flows. I. Solution path and alternator', *Phys. Plasmas* **16**, 122110, 1–14 (2009).

215. J. P. Goedbloed, 'New construction of the magnetohydrodynamic spectrum of stationary plasma flows. II. Rayleigh–Taylor and Kelvin–Helmholtz instability', *Phys. Plasmas* **16**, 122111, 1–13 (2009).

216. J. P. Goedbloed, R. Keppens and S. Poedts, *Advanced Magnetohydrodynamics; with Applications to Laboratory and Astrophysical Plasmas* (Cambridge, Cambridge University Press, 2010); ISBN 978-0-521-87957-6 (HB)/-70524-0 (PB).

217. R. Keppens, J. P. Goedbloed and J. W. S. Blokland, 'Magnetohydrodynamic modeling of fusion plasmas', *Transactions of Fusion Science and Technology* **57**, 137–147 (2010).

218. J. P. Goedbloed, 'New approach to MHD spectral theory of stationary plasma flows', *Plasma Phys. Contr. Fusion* **53**, 074001, 1–11 (2011). [Special issue: Invited papers from the International Congress and Latin American Workshop on Plasma Physics (ICPP-LAWPP), 8–13 August, 2010, Santiago de Chile.]

219. J. P. Goedbloed and J. P. Freidberg, 'MHD spectral analysis of the resistive wall mode in a rotating plasma', *52nd Annual Meeting of the APS Division of Plasma Physics*, 8–12 November 2010, Chicago, JO4.00003 (2010).

220. J. P. Goedbloed and J. P. Freidberg, 'Poloidal and toroidal plasma rotation and resistive wall modes in tokamaks', *38th Eur. Conf. on Controlled Fusion and Plasma Physics*, 27 June–1 July 2011, Strasbourg, P1.091 (2011).

221. J. P. Goedbloed, 'Comment on modes in rotating plasmas: General equations and continuous modes for large aspect ratio tokamaks [*Phys. Plasmas* **18**, 092103, 1–5 (2011)]', *Phys. Plasmas* **19**, 064701, 1–5 (2012).

222. Hans Goedbloed and Rony Keppens, 'MHD instabilities of accretion disks and jets: a new spectral theory of rotating plasmas', *Magnetic Fields in the Universe III – From Laboratory and Stars to Primordial Structures*, Proceedings conference, Zakopane, Poland, 21–27 August, 2011, Eds. M. Soida, K. Otmiaowska-Mazur, E. M. de Gouveia Dal Pino and A. Lazarian, 83–86 (Jagiellonian University, Kraków, 2012).

223. J. P. Goedbloed, 'Constructing the spectral web of rotating plasmas', *54th Annual Meeting of the APS Division of Plasma Physics*, 29 October–2 November 2012, Rhode Island, PO7.002 (2012).

224. J. P. Goedbloed and R. Keppens, 'Stability of magnetic flux ropes with background flow', *54th Annual Meeting of the APS Division of Plasma Physics*, 29 October–2 November 2012, Rhode Island, MN9.004 (2012).

225. J. P. Goedbloed, 'MHD spectroscopy of rotating plasmas', *55th Annual Meeting of the APS Division of Plasma Physics*, 11–15 November 2013, Denver, TO5.009 (2013).

226. J. P. Goedbloed, 'The MHD spectral web: Connecting all instabilities of stationary plasmas', *57th Annual Meeting of the APS Division of Plasma Physics*, 16–20 November 2015, Savannah, UO5.001 (2015).

227. J. P. Goedbloed, 'The Spectral Web: A new theory of the stability of stationary plasma flows', *43rd Eur. Conf. on Controlled Fusion and Plasma Physics*, 4–8 July 2016, Leuven, O3.406 (2016).

228. J. P. Goedbloed, 'MHD instabilities in astrophysical plasmas: very different from MHD instabilities in tokamaks', *44rd Eur. Conf. on Controlled Fusion and Plasma Physics*, 26–30 June 2017, Belfast, I2.405 (2017); *Plasma Phys. Contr. Fusion* **60**, 014001, 1–5 (2017).

229. J. P. Goedbloed, 'The Spectral Web of stationary plasma equilibria. I. General theory', *Phys. Plasmas* **25**, 032109, 1–13 (2018).

230. J. P. Goedbloed, 'The Spectral Web of stationary plasma equilibria. II. Internal modes', *Phys. Plasmas* **25**, 032110, 1–22 (2018).

231. Rony Keppens, Oliver Porth and Hans Goedbloed, 'The role of magnetic fields in AGN activity and feedback', Chapter 4 in *Cosmic Magnetic Fields*, eds. J. S. Almeida and M. J. M. González (Cambridge, Cambridge University Press, 2018), 87–122. ISBN 978-1-107-09781-0. DOI: 10.1017/9781316160916.

232. Hans Goedbloed, Rony Keppens and Stefaan Poedts, *Magnetohydrodynamics of Laboratory and Astrophysical Plasmas* (Cambridge, Cambridge University Press, 2019); ISBN 978-1-107-12392-2. DOI: 10.1017/9781316403679.

233. Rony Keppens and Hans Goedbloed, 'Wave modes in a cold pair plasma: the complete phase and group diagram point-of-view', *Journal of Plasma Physics* **85** (1) (2019). DOI:10.1017/S0022377819000102.

234. Rony Keppens and Hans Goedbloed, 'A fresh look on waves in ion-electron plasmas', *Frontiers in Astronomy and Space Sciences* (4 March, 2019). DOI: 10.3389/fspas.2019.00011.

235. Rony Keppens, Hans Goedbloed and Jean-Baptiste Durrive, 'Wave modes in a warm pair plasma: a relativistically complete two-fluid analysis', *Journal of Plasma Physics* **85** (4) (2019). DOI:10.1017/S0022377819000552.

236. Hans Goedbloed, 'The Spectral Web of the Super-Alphénic Rotational Instability in accretion disks: An alternative to the MRI paradigm!', *46th Eur. Conf. on Controlled Fusion and Plasma Physics*, 8–1 July 2017, Milano, O4.401 (2019).

237. Hans Goedbloed and Rony Keppens, 'The Super-Alphénic Rotational Instability in accretion disks about black holes', *Astrophys. J. Suppl.*, 259:65 (41 pp), 2022 April. https://doi.org/10.3847/1538-4365/ac573c

238. Hans Goedbloed, Rony Keppens and Stefaan Poedts, 'Leaky modes in coronal magnetic flux tubes revisited', *J. Plasma Physics* **89**, 805890520, 1–25 (2023). https://doi.org/10.1017/S0022377823001058