

Carl D. Murray

LIST OF PUBLICATIONS

Scientific Papers:

1. "The long-term evolution of the Quadrantid meteor stream" by I.P. Williams, C.D. Murray and D.W. Hughes. *Mon. Not. R. astr. Soc.* **189**, 483–492 (1979).
2. "The orbital evolution of the Quadrantid meteor stream between AD 1830 and 2030" by D.W. Hughes, I.P. Williams and C.D. Murray. *Mon. Not. R. astr. Soc.* **189**, 493–500 (1979).
3. "The effect of orbital evolution on the influx of Quadrantid meteoroids" by C.D. Murray, D.W. Hughes and I.P. Williams. *Mon. Not. R. astr. Soc.* **190**, 733–742 (1980).
4. "The Quadrantid meteor stream: past, present and future" by D.W. Hughes, I.P. Williams and C.D. Murray. In *Solid Particles in the Solar System* (I. Halliday and B.A. McIntosh, Eds) 153–156 (Reidel, 1980).
5. "The narrow rings of Jupiter, Saturn and Uranus" by S.F. Dermott, C.D. Murray and A.T. Sinclair. *Nature* **284**, 309–313 (1980).
6. "Origin of the eccentricity gradient and apse alignment of the ϵ ring of Uranus" by S.F. Dermott and C.D. Murray. *Icarus* **43**, 338–349 (1980).
7. "Resonant structure of the asteroid belt" by S.F. Dermott and C.D. Murray. *Nature* **290**, 664–668 (1981).
8. "The dynamics of tadpole and horseshoe orbits. I. Theory" by S.F. Dermott and C.D. Murray. *Icarus* **48**, 1–11 (1981).
9. "The dynamics of tadpole and horseshoe orbits. II. The coorbital satellites of Saturn" by S.F. Dermott and C.D. Murray. *Icarus* **48**, 12–22 (1981).
10. "Nodal regression of the Quadrantid meteor stream: An analytic approach" by C.D. Murray. *Icarus* **49**, 125–134 (1981).
11. "Asteroid rotation rates depend on diameter and type" by S.F. Dermott and C.D. Murray. *Nature* **296**, 418–421 (1982).
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13. "Nature of the Kirkwood gaps in the asteroid belt" by S.F. Dermott and C.D. Murray. *Nature* **301**, 201–205 (1983).
14. "Asteroid rotation rates" by S.F. Dermott, A.W. Harris and C.D. Murray. *Icarus* **57**, 14–34 (1984).
15. "Structure of the 3:1 jovian resonance: A comparison of numerical methods" by C.D. Murray and K. Fox. *Icarus* **59**, 221–233 (1984).

16. "Distribution and evolution of asteroid rotation rates" by S.F. Dermott and C.D. Murray. *Phil. Trans. R. Soc. London A* **313**, 157–164 (1984).
17. "The asteroid ring" by S.F. Dermott and C.D. Murray. In *Planetary Rings* (A. Brahic, Ed.) 695–701 (Cepadues, 1984).
18. "Variation of the UBV colors of S-class asteroids with semimajor axis and diameter" by S.F. Dermott, J. Gradie and C.D. Murray. *Icarus* **62**, 289–297 (1985).
19. "A note on Le Verrier's expansion of the disturbing function" by C.D. Murray. *Celest. Mech.* **36**, 163–164 (1985).
20. "The Hilda group and the Hecuba gap" by A. Milani, C.D. Murray and A.M. Nobili. In *Asteroids, Comets, Meteors II* (C.-I. Lagerkvist and H. Rickman, Eds) 147–151 (Uppsala University Press, Uppsala, 1986).
21. "The structure of the 2:1 and 3:2 jovian resonances" by C.D. Murray. *Icarus* **65**, 70–82 (1986).
22. "The reducing transformation and apocentric librators" by J. Henrard, A. Lemaitre, A. Milani and C.D. Murray. *Celest. Mech.* **38**, 335–344 (1986).
23. "Dynamics of the uranian and saturnian satellite systems: A chaotic route to melting Miranda?" by S.F. Dermott, R. Malhotra and C.D. Murray. *Icarus* **76**, 295–334 (1988).
24. "Project LONGSTOP" by A.E. Roy, I.W. Walker, A.J. McDonald, I.P. Williams, K. Fox, C.D. Murray, A. Milani, A.M. Nobili, P.J. Message, A.T. Sinclair and M. Carpino. *Vistas in Astron.* **32**, 225–234 (1988).
25. "The dust rings of Uranus: A picture is worth a million words" by C.D. Murray and R.P. Thompson. *Vistas in Astron.* **32**, 225–234 (1988).
26. "Secular perturbations of the uranian satellites: Theory and practice" by R. Malhotra, K. Fox, C.D. Murray and P.D. Nicholson. *Astron. & Astrophys.* **221**, 348–358 (1989).
27. "Structure of the uranian rings" by C.D. Murray and R.P. Thompson. In *Dynamics of Astrophysical Disks* (J. Sellwood, Ed) 17–18 (Cambridge University Press, 1989).
28. "Astrometric observations of Neptune and Triton obtained in 1988 and comparison with theory" by D.B. Taylor, D.H.P. Jones, L.V. Morrison, C.D. Murray and I.P. Williams. *Astron. & Astrophys.* **232**, 565–569 (1990).
29. "Orbits of shepherd satellites deduced from the structure of the rings of Uranus" by C.D. Murray and R.P. Thompson. *Nature* **348**, 499–502 (1990).
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32. "Expansion of the planetary disturbing function to eighth order in the individual orbital elements" by C.D. Murray and D. Harper (pp vii+436). *QMW Maths Notes*, No.15, (1993).
33. "Preliminary analysis of CCD observations of Saturn's satellites" by K. Beurle, D. Harper, D.H.P. Jones, C.D. Murray, D.B. Taylor and I.P. Williams. *Astron. Astrophys.* **269**, 564–567 (1993).
34. "Orbits of narrow rings and small satellites" by C.D. Murray. Report presented to Cassini Imaging Team Rings Working Group, September 1993.
35. "Atlas of the planar, circular, restricted three-body problem. I. Internal orbits" by O.C. Winter and C.D. Murray. (pp 397). *QMW Maths Notes*, No.16, (1994).
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37. "Planetary ring dynamics" by C.D. Murray. *Phil. Trans. R. Soc. A.*, **349**, 335–344 (1994).
38. "The dynamical effects of drag in the circular restricted three-body problem: I. The location and stability of the Lagrangian equilibrium points" by C.D. Murray. *Icarus* **112**, 465–484 (1994).
39. "Disturbing function expansions" by D. Harper and C.D. Murray. *Maple Technical Newsletter*, Special issue, December 1994, 24–28. (1994).
40. "Project CRISS-CROSS: A preliminary analysis" by O.C. Winter and C.D. Murray. In *From Newton to Chaos: Modern Techniques for Understanding and Coping with Chaos in N-Body Dynamical Systems* (A.E. Roy and B.A. Steves, Eds) Plenum, New York (1995).
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42. "The martian atmosphere as a meteoroid detector" by L. Adolfsson, B. Gustafson and C.D. Murray. *Icarus* **119**, 144–152 (1996).
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47. "Overlap of ORS ring requirements in Cassini tours" by C.D. Murray. Report presented to Cassini ISS Rings Working Group, LPL, 21 October 1996.

48. "The Liapunov exponent as a tool for exploring phase space" by O.C. Winter and C.D. Murray. In *Chaos in Gravitational N-Body Systems* (J. Muzzio, S. Ferraz-Mello & J. Henrard, Eds.), 215–219. Kluwer, Dordrecht (1996).
49. "CCD astrometry of Saturn's satellites 1990–1994" by D. Harper, C.D. Murray, K. Beurle, I.P. Williams, D.H.P. Jones, D.B. Taylor and S.C. Greaves. *Astron. Astrophys. Suppl. Ser.* **121**, 65–69 (1997).
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51. "Resonance and chaos. I. First order interior resonances" by O.C. Winter and C.D. Murray. *Astron. Astrophys.* **319**, 290–304 (1997).
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54. "Resonance and chaos. II. Exterior resonances and asymmetric libration" by O.C. Winter and C.D. Murray. *Astron. Astrophys.* **328**, 399–408 (1997).
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64. "Analytical modelling of the uranian satellite system" by A.A. Christou and C.D. Murray. In *Planetary Systems: The Long View*, (L.M. Celnikier and J. Trần Thanh Vân, Eds), 167–169. Editions Frontières, France (1999).
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71. "Origin and evolution of Trojan asteroids" by F. Marzari, H. Scholl, C.D. Murray and C. Lagerkvist. In *Asteroids III* (W. Bottke, A. Cellino, P. Paolicchi, R. Binzel, Eds.) University of Arizona Press, Tucson (2002).
72. "Saturn's rings: Pre-Cassini status and mission goals" by J.N. Cuzzi, J.E. Colwell, L.W. Esposito, C.C. Porco, C.D. Murray, P.D. Nicholson, L.J. Spilker, E.A. Marouf, R.G. French, N. Rappaport, Muhleman, D. *Sp. Sci. Rev.* **104**, 209–251 (2002).
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75. “Cassini imaging of Jupiter’s atmosphere, satellites and rings” by C.C. Porco, R.A. West, A. McEwen, A.D. Del Genio, A.P. Ingersoll, P. Thomas, S. Squyres, L. Dones, C.D. Murray, T.V. Johnson, J.A. Burns, A. Brahic, G. Neukum, J. Veverka, J.M. Barbara, T. Denk, M. Evans, J.J. Ferrier, P. Geissler, P. Helfenstein, T. Roatsch, H. Throop, M. Tiscareno, A. Vasavada. *Science* **299**, 1541–1547 (2003).
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