FRANCES BAGENAL
Laboratory for Atmospheric and Space Physics
University of Colorado
Boulder CO 80309-0392

PERSONAL DATA

Born: November 4, 1954 Dorchester, England
Naturalized US citizen (9/6/2001)

EDUCATION

1973-1976 University of Lancaster, BSc in Physics and Geophysics
1976-1981 Massachusetts Institute of Technology, Ph.D. in Earth and Planetary Sciences

The inner magnetosphere of Jupiter and Io plasma torus, MIT Center for Space Research Technical Report CSR-T-81-3, July 1981. Thesis adviser Professor John W. Belcher

APPOINTMENTS

2015- Senior Research Associate IV, Laboratory for Space and Atmospheric Physics
2020-2023 Assistant Director for Planetary Science, LASP
1992-2015 Research Associate III, Laboratory for Space and Atmospheric Physics
1999-2015 Professor, Department of Astrophysical and Planetary Sciences, University of Colorado, Boulder
1995-1996, 1997-2001, 2005-2006, 2009-2010 Associate Chair, Department of Astrophysical and Planetary Sciences
1993-1999 Associate Professor, APS Dept., University of Colorado, Boulder
1989-1993 Assistant Professor, APS Dept., University of Colorado, Boulder
1987-1988 Visiting Scientist, High Altitude Observatory, National Center for Atmospheric Research
1985-1987 Science and Engineering Research Council Advanced Research Fellow, Space Physics Group, Imperial College, London
1982-1985 Post-Doctoral Research Assistant, Space Physics Group, Imperial College
1981-1982 Post-Doctoral Research Assistant, MIT, Center for Space Research
1977-1981 Research Assistant, Center for Space Research, MIT

AWARDS

2023 NASA Exceptional Public Service Medal for Juno Prime Mission
2021 Member of National Academy of Sciences
2019 Fellow of the American Astronomical Society
2018 James Van Allen Lecture award, American Geophysical Union
2010 Boulder Faculty Assembly's Excellence in Research Award
2006 Fellow of the American Geophysical Union
NASA Group Achievement Awards for contributions to the *Voyager*, *Galileo*, *Deep Space 1*, *New Horizons* and *Juno* missions.
2000, 2003 President's Faculty Excellence Award for Advancing Teaching and Learning through Technology, University of Colorado, Boulder

PROFESSIONAL ACTIVITIES AND SOCIETIES (past 20 years)

2022 Steering Committee of Decadal Survey of Solar and Space Physics, National Academy of Sciences
2020 - 2022 Co-Chair, Committee to address Increasing Diversity and Inclusion in the Leadership of Competed Space Missions, National Academies of Science, Engineering & Medicine
2020 - 2022 Giant Planets Panel of Decadal Survey of Planetary Science and Astrobiology, National Academy of Science
2016 - Standing Review Board, NASA Europa Clipper mission

2009 - 2010 Chair of the Planetary Science Subcommittee of the Science Committee of the NASA Advisory Council
2004 - 2009 Chair, NASA's Outer Planet's Assessment Group
2004 - 2010 Editor, STATUS, newsletter of the Committee on the Status of Women in Astronomy of the American Astronomical Society
2005 - 2008 Astronomy Education Board, American Astronomical Society
2004 - 2007 Member, Committee of the Division of Planetary Science of the American Astronomical Society

DEMOGRAPHICS STUDIES

2023 Bagenal, F. (2023), Enhancing demographics and career pathways of the space physics workforce in the US. *Frontiers Astron. Space Sci. 10:1130803. doi: 10.3389/fspas.2023.1130803*
2020 - 2022 Working Group on State of the Profession, Decadal Survey of Planetary Sciences, National Academy of Sciences
2020 Member, Planetary Science Survey Committee, AAS-DPS, conducted by American Institute of Physics
2010 Chair, Planetary Workforce Survey, AGU/AAS-DPS/LPSC, conducted by the American Institute of Physics

PUBLIC OUTREACH

A dozen press articles in publications such as *Sky & Telescope, Physics World, Nature, Science*
20-50 public talks per year to schools, planetaria, astronomy clubs, etc on New Horizons mission to Pluto and/or Juno mission to Jupiter
IMDB profile https://www.imdb.com/name/nm3293128/?ref_=fn_al_nm_1

NASA MISSIONS

Voyager: 1977-1989. Co-I on the Plasma Science (PLS) instrument. Worked with PLS data at Jupiter, Saturn, Uranus & Neptune. Concentrated on plasma between 5 and 30 R_J at Jupiter.
Galileo: 1992-2003. Interdisciplinary Scientist. Concentrated on Plasma Science (PLS), Plasma Wave Science (PWS) data and plasma between 5 and 30 R_J at Jupiter.
Deep Space 1: 1997-2001. Team member of PEPE (PI. Dave Young). Analysis of data obtained on the interaction of the solar wind with the Comet Borrelly.
Cassini: While not officially involved in the Cassini Project, I have worked with Cassini plasma data (CAPS, PI Dave Young) and the UVIS data (PI Larry Esposito). The combination of data obtained on the Jupiter flyby, UVIS observations of the Io plasma torus emissions, Galileo in situ data and physical chemistry models have proven to be particularly productive.
New Horizons: 2001-2023. Co-I and Particles/Heliosphere Theme Lead. Analysis of data obtained on the interaction of the solar wind with the Pluto system.
Juno: 2003-2023. Co-I and Co-Chair of the Magnetospheres Working Group and the Science Planning Working Group. Study of magnetospheric plasmasheet and coupling to Jupiter's atmosphere.

STUDENTS

Graduated PhDs: Sarah Gibson, Frank Crary, Chris Balch, David Brain, Andrew Steffl, Licia Ray, Vincent Dols, Bobby Fleshman, Mariel Desroche, Drake Ranquist, Edward Nerney
Current graduate students: Jian-zhao Wang

BOOKS & BOOK CHAPTERS

* 13 first author, # 3 supervised student first author

1. *Planetary magnetospheres, F. **Bagenal**, in *Solar System Magnetic Fields*, Priest (ed.), D. Reidel 1985
2. Jovian Decametric Arc Pattern and Multiple Reflection Alfven Wave Model, Y. Leblanc & F. **Bagenal**, *Planetary Radio Emissions*, Rucker, Bauer and Pedersen (eds.) 1988

3. *Torus-magnetosphere coupling, F. **Bagenal**, in *Time-Variable phenomena in the Jovian system,* M.Belton (ed.) NASA Special Publication 494, 1989
4. EUV Planetary Astronomy, P.D. Feldman & F. **Bagenal**, in *EUV Astronomy*, Malina, Bowyer (eds), Pergamon, pp252-260, 1991
5. The plasma environment of Uranus, J.W. Belcher, R.L. McNutt, J.D. Richardson, R.S. Selesnick, E.C. Sittler, F. **Bagenal**, in *Uranus* (Bergstrahl, Miner, Mathews, eds.), pp. 780-830,Univ. of Arizona, Tucson, 1991
6. #Modelling the large scale structure of the solar corona, S. Gibson, F. **Bagenal**, *Proceedings of the First SOHO workshop*, ESA SP-348, 1992
7. *Plasma, F. **Bagenal**, in *Enclyopedia of Planetary Sciences,* Van Nostrand Reinhold, New York, pp 624-630, 1997
8. #Modeling a simple coronal streamer during Whole Sun Month, Gibson, S. E., F. **Bagenal**, D. Biesecker, M. Guhathakurta, J.T. Hoeksema, B. J. Thompson, *Proc. of the Fifth SOHO Workshop*, ESA SP-404, 319,1997.
9. An Overview of Electrodynamic Tether Performance in the Jovian System" *Proceedings of the 1997 NASA Tether Technology Interchange Meeting,* Huntsville, September 1997
10. *Pluto's interaction with the solar wind, F. **Bagenal**, T. Cravens, J.G. Luhmann, R.L. McNutt, and A. Cheng, in *Pluto,* eds. S.A. Stern & D.J. Tholan, U. Arizona Press, pp 523-555, 1997
11. Planetary Magnetospheres, M. Kivelson and F. **Bagenal**, *Enclyopedia of the Solar System,* Academic Press, pp477-497, 1998
12. Planetary Magnetospheres and the Interplanetary Medium, J.A. Van Allen, F. **Bagenal**, in *The New Solar System* (4th edition), Eds.J. Kelly Beatty, Carolyn Collins Petersen, Andrew Chaikin, Cambridge University Press & Sky Publishing, 1998
13. #Analysis of H-alpha observations of high altitude coronal condensations, U.A. Allen, F. **Bagenal**, A. Hundhausen, in New Perspectives on Solar Prominences, ASP conference series, 150 p 290-293
14. *Planetary Magnetospheres, F. **Bagenal**, Encylopedia of Astronomy & Astrophysics, Nature Publishing, 2001
15. Terrestrial Radio Emission: AKR, R. E. Ergun, Y.-J. Su, and F. **Bagenal**, in Planetary Radio Emissions V, editied by H. O. Rucker, M. L. Kaiser, and Y. Leblanc, Österreichischen Akademie der Wissenschaften, Vienna, Austria, p271, 2001.
16. *Chapter 1 – Introduction, Fran **Bagenal**, Tim Dowling, Bill McKinnon, in *Jupiter: Planet, Satellites, Magnetosphere*, eds. **Bagenal**, Dowling, McKinnon, Cambridge University Press, 2004
17. Chapter 21 - Magnetospheric Interactions with Satellites. Margaret G. Kivelson, Fran **Bagenal**, William S. Kurth, Fritz M. Neubauer, Chris Paranicas, Joachim Saur, , in *Jupiter: Planet, Satellites, Magnetosphere*, eds. **Bagenal**, Dowling, McKinnon, Cambridge University Press, 2004
18. Chapter 23 - The Io Neutral Clouds and Plasma Torus, N. Thomas, F. **Bagenal**, T.W. Hill, J.K. Wilson, in *Jupiter: Planet, Satellites, Magnetosphere*, eds. **Bagenal**, Dowling, McKinnon, Cambridge University Press, 2004
19. Planetary Magnetospheres, M.G. Kivelson, F. **Bagenal**, in *Encyclopedia of the Solar System* (2nd edition), (eds. McFadden, Weissman, Johnson) , pp 519-540, 2007
20. Io's Neutral Clouds, Plasma Torus and Magnetospheric Interaction, N.M. Schneider, and F. **Bagenal**, in *Io After Galileo*, (ed. R. Lopes), Praxis, 2007.
21. *Comparative Planetary Environments, F. **Bagenal**, in *Heliophysics: Plasma Physics of the Local Cosmos*, C.J. Schrijver, G.L. Siscoe (eds), Cambridge University Press, pp 360-398, 2009
22. Comparative Auroral Physics: Earth and Other Planets, Barry Mauk, Fran **Bagenal**, in *Auroral Phenomenology and Magnetospheric Processes: Earth and Other Planets*, eds. Keiling, Donovan, **Bagenal**, Karlsson, AGU Chapman Monograph, #197, 2012
23. *Planetary Magnetospheres, F. **Bagenal**, in *Planets, Stars and Stellar Systems. Volume 3: Solar and Stellar Planetary Systems,* T.D. Oswalt, L. French, P. Kalas (eds.), DOI 10.1007/978-94-007-5606-9_1, Springer Dordrecht 2013
24. Solar Wind Interaction with the Giant Magnetospheres and Earth's Magnetosphere, Delamere, P.A. et al., in *Magnetotails of the Solar System,* eds. Keiling, Delamere, Jackman, AGU Chapman Monograph, 2014
25. Planetary Magnetospheres, M.G. Kivelson, F. **Bagenal**, *Encyclopedia of the Solar System, Third Edition* by D. Breuer, T. Johnson, T. Spohn, 2014
26. *Jupiter, F. **Bagenal**, *Discoveries in Modern Science: Exploration, Invention, Technology.* Ed. James Trefil. Farmington Hills: Macmillan, 2015
27. Heliophysics: Active stars, their astrospheres and impacts on planetary environments, Vol IV, Eds. C.J. Schrijver, F. **Bagenal**, J.J. Sojka, Cambridge University Press, 2016

28. Solar Wind and Internally Driven Dynamics: Influences on Magnetodiscs and Auroral Response, P.A. Delamere, F. **Bagenal**, C. Paranicas, A. Masters, A. Radioti, B. Bonfond, L. Ray, X. Jia, J. Nichols, in *The Magnetodiscs and Aurorae of Giant Planets*, *ISSI Space Science Series, 50*, 51-97, DOI:10.1007/978-1-4939-3395-2_4, 2016
29. A model of the Jovian internal field derived from in-situ and auroral constraints, Hess, S. L. G., Bonfond, B., **Bagenal**, F., Lamy, L., in *Planetary Radio Emissions VIII,* Proceedings of the 8th International Workshop, G. Fischer, G. Mann, M. Panchenko, and P. Zarka. (Eds.) Austrian Academy of Sciences Press, Vienna, 157-167, 2017
30. Principles Of Heliophysics: a textbook on the universal processes behind planetary habitability. Schriver, K., **Bagenal**, F., & 59 coauthors, 2019arXiv191014022S
31. *Space Environment of Io, F. **Bagenal**, V. Dols, *Io Book*, Elsevier 2022
32. *Solar Wind Interaction with the Pluto System, F. **Bagenal,** D.J. McComas, H.A. Elliott, E. J. Zirnstein, R.L. McNutt, C. M. Lisse, P. Kollmann, P. A. Delamere and N. P. Barnes, in *The Pluto System After New Horizons*, U. of AZ Press Space Science Series, 2022
33. *Space Environment of Io, **Bagenal,** F., Dols, V.. In: Lopes, R.M.C., de Kleer, K., Tuttle Keane, J. (eds) Io: A New View of Jupiter's Moon . Astrophysics and Space Science Library, vol 468. Springer, Cham. https://doi.org/10.1007/978-3-031-25670-7_9, 2023
34. *Magnetosphere of Jupiter, F. **Bagenal,** Oxford Research Encyclopedia of Planetary Science, Oxford University Press, 2024

JOURNAL PUBLICATIONS

* first author, # supervised student first author, h=56

1. Hargreaves, J. K., & **Bagenal**, F. (1977), The behavior of the electron content during ionospheric storms: A new method of presentation and comments on the positive phase, *J. Geophys. Res.*, 82, 731, doi:10.1029/JA082i004p00731
2. Bridge, H. S., Belcher, J. W., Lazarus, A. J., Sullivan, J. D., McNutt, R. L., **Bagenal**, F., Scudder, J. D., Sittler, E. C., Siscoe, G. L., Vasyliunas, U. M., Goertz, C. K., & Yeates, C. M. (1979), Plasma Observations Near Jupiter: Initial Results from Voyager 1, *Science,* 204, 987-991, doi:10.1126/science.204.4396.987
3. Sullivan, J. D., & **Bagenal**, F. (1979), In situ identification of various ionic species in Jupiter's magnetosphere, *Nature,* 280, 798-799, doi:10.1038/280798a0
4. McNutt, R. L., Belcher, J. W., Sullivan, J. D., **Bagenal**, F., & Bridge, H. S. (1979), Departure from rigid co-rotation of plasma in Jupiter's dayside magnetosphere, *Nature,* 280, 803, doi:10.1038/280803a0
5. Bridge, H. S., Belcher, J. W., Lazarus, A. J., Sullivan, J. D., **Bagenal**, F., McNutt, R. L., Ogilvie, K. W., Scudder, J. D., Sittler, E. D., Vasyliunas, V. M., & Goertz, C. K. (1979), Plasma Observations Near Jupiter: Initial Results from Voyager 2, *Science,* 206, 972-976, doi:10.1126/science.206.4421.972
6. Richardson, J. D., Siscoe, G. L., **Bagenal**, F., & Sullivan, J. D. (1980), Time dependent plasma injection by Io, *Geophys. Res. Lett.,* 7, 37-40, doi:10.1029/GL007i001p00037
7. ***Bagenal**, F., Sullivan, J. D., & Siscoe, G. L. (1980), Spatial distribution of plasma in the Io torus, *Geophys. Res. Lett.,* 7, 41-44, doi:10.1029/GL007i001p00041
8. Bridge, H. S., Belcher, J. W., Lazarus, A. J., Olbert, S., Sullivan, J. D., **Bagenal**, F., Gazis, P. R., Hartle, R. E., Ogilvie, K. W., Scudder, J. D., Sittler, E. C., Eviatar, A., Siscoe, G. L., Goertz, C. K., & Vasyliunas, V. M. (1981), Plasma Observations near Saturn: Initial Results from Voyager 1, *Science,* 212, 217-224, doi:10.1126/science.212.4491.217
9. ***Bagenal**, F., & Sullivan, J. D. (1981), Direct plasma measurements in the Io torus and inner magnetosphere of Jupiter, *J. Geophys. Res.*, 86, 8447-8466, doi:10.1029/JA086iA10p08447
10. Siscoe, G. L., Eviatar, A., Thorne, R. M., Richardson, J. D., **Bagenal**, F., & Sullivan, J. D. (1981), Ring current impoundment of the Io plasma torus, *J. Geophys. Res.*, 86, 8480-8484, doi:10.1029/JA086iA10p08480
11. Bridge, H. S., **Bagenal**, F., Belcher, J. W., Lazarus, A. J., McNutt, R. L., Sullivan, J. D., Gazis, P. R., Hartle, R. E., Ogilvie, K. W., Scudder, J. D., Sittler, E. C., Eviatar, A., Siscoe, G. L., Goertz, C. K., & Vasyliunas, V. M. (1982), Plasma Observations near Saturn: Initial Results from Voyager 2, *Science,* 215, 563-570, doi:10.1126/science.215.4532.563
12. Tokar, R. L., Gurnett, D. A., **Bagenal**, F., & Shaw, R. R. (1982), Light ion concentrations in Jupiter's inner magnetosphere, *J. Geophys. Res.*, 87, 2241-2245, doi:10.1029/JA087iA04p02241

13. Tokar, R. L., Gurnett, D. A., & **Bagenal**, F. (1982), The proton concentration in the vicinity of the Io plasma torus, *J. Geophys. Res.*, 87, 10395-10400, doi:10.1029/JA087iA12p10395
14. Lazarus, A. J., Hasegawa, T., & **Bagenal**, F. (1983), Long-lived particulate or gaseous structure in Saturn's outer magnetosphere?, *Nature,* 302, 230-232, doi:10.1038/302230a0
15. ***Bagenal**, F. (1983), Alfvén wave propagation in the Io plasma torus, *J. Geophys. Res.*, 88, 3013-3025, doi:10.1029/JA088iA04p03013
16. ***Bagenal**, F. (1985), Plasma conditions inside Io's orbit: Voyager measurements, *J. Geophys. Res.*, 90, 311-324, doi:10.1029/JA090iA01p00311
17. ***Bagenal**, F., McNutt, R. L., Belcher, J. W., Bridge, H. S., & Sullivan, J. D. (1985), Revised ion temperatures for Voyager plasma measurements in the Io plasma torus, *J. Geophys. Res.*, 90, 1755-1758, doi:10.1029/JA090iA02p01755
18. ***Bagenal**, F. (1986), Planetary magnetospheres: The double tilt of Uranus, *Nature,* 321, 809-810, doi:10.1038/321809a0
19. Bridge, H. S., Belcher, J. W., Coppi, B., Lazarus, A. J., McNutt, R. L., Olbert, S., Richardson, J. D., Sands, M. R., Selesnick, R. S., Sullivan, J. D., Hartle, R. E., Ogilvie, K. W., Sittler, E. C., **Bagenal**, F., Wolff, R. S., Vasyliunas, V. M., Siscoe, G. L., Goertz, C. K., & Eviatar, A. (1986), Plasma Observations near Uranus: Initial Results from Voyager 2, *Science,* 233, 89-93, doi:10.1126/science.233.4759.89
20. McNutt, R. L., **Bagenal**, F., Belcher, J., Bridge, H., Eviatar, A., Goertz, C., Lazarus, A. J., Ogilvie, K., Richardson, J., Sands, M., Selesnick, R., Siscoe, G., Sittler, E., & Vasyliunas, V. M. (1987), The low energy plasma in the Uranian magnetosphere, *Adv. Space Res., 7,* 237-241, doi:10.1016/0273-1177(87)90224-9
21. ***Bagenal**, F. (1987), Measuring the Io plasma torus, *Nature,* 327, 460, doi:10.1038/327460a0
22. ***Bagenal**, F., Belcher, J. W., Sittler, E. C., & Lepping, R. P. (1987), The Uranian bow shock: Voyager 2 inbound observations of a high Mach number shock, *J. Geophys. Res.*, 92, 8603-8612, doi:10.1029/JA092iA08p08603
23. ***Bagenal**, F., & Leblanc, Y. (1988), Io's Alfven wave pattern and the Jovian decametric arcs, *Astronomy & Astrophysics, 197,* 311-319, doi:
24. Smith, R. A., **Bagenal**, F., Cheng, A. F., & Strobel, D. F. (1988), On the energy crisis in the Io plasma torus, *Geophys. Res. Lett.,* 15, 545-548, doi:10.1029/GL015i006p00545
25. Moses, S. L., Coroniti, F. V., Kennel, C. F., **Bagenal**, F., Lepping, R. P., Quest, K. B., Kurth, W. S., & Scarf, F. L. (1989), Electrostatic waves in the bow shock at Uranus, *J. Geophys. Res.*, 94, 13367-13376, doi:10.1029/JA094iA10p13367
26. ***Bagenal**, F., & McNutt, R. L. (1989), Pluto's interaction with the solar wind, *Geophys. Res. Lett.,* 16, 1229-1232, doi:10.1029/GL016i011p01229
27. Belcher, J. W., Bridge, H. S., **Bagenal**, F., Coppi, B., Divers, O., Eviatar, A., Gordon, G. S., Lazarus, A. J., McNutt, R. L., Ogilvie, K. W., Richardson, J. D., Siscoe, G. L., Sittler, E. C., Steinberg, J. T., Sullivan, J. D., Szabo, A., Villanueva, L., Vasyliunas, V. M., & Zhang, M. (1989), Plasma Observations near Neptune: Initial Results from Voyager 2, *Science,* 246, 1478-1483, doi:10.1126/science.246.4936.1478
28. Leblanc, Y., & **Bagenal**, F. (1990), Can we explain the Jovian decametric arc pattern with the multiple reflection Alfven wave model?, *Adv. Space Res., 10,* 49-53, doi:10.1016/0273-1177(90)90085-E
29. McNutt, R. L., **Bagenal**, F., & Thorne, R. M. (1990), Observation of auroral secondary electrons in the Jovian magnetosphere, *Geophys. Res. Lett.,* 17, 291-294, doi:10.1029/GL017i003p00291
30. ***Bagenal**, F., & Gibson, S. (1991), Modeling the large-scale structure of the solar corona, *J. Geophys. Res.*, 96, 17663-17674, doi:10.1029/90JA02625
31. ***Bagenal**, F. (1992), Giant Planet Magnetospheres, *Ann. Rev. Earth Planet. Sci., 20,* 289, doi:10.1146/annurev.ea.20.050192.001445
32. ***Bagenal**, F., Shemansky, D. E., McNutt, R. L., Schreier, R., & Eviatar, A. (1992), The abundance of O^{++} in the Jovian magnetosphere, *Geophys. Res. Lett.,* 19, 79-82, doi:10.1029/92GL00070
33. Leblanc, Y., **Bagenal**, F., & Dulk, G. A. (1993), The Jovian left hand polarized radiation, *Astronomy & Astrophysics, 276,* 603, doi:
34. Hall, D. T., Gladstone, G. R., Moos, H. W., **Bagenal**, F., Clarke, J. T., Feldman, P. D., McGrath, M. A., Schneider, N. M., Shemansky, D. E., Strobel, D. F., & Waite, J. H. (1994), Extreme Ultraviolet Explorer Satellite Observation of Jupiter's Io Plasma Torus, *Ap. J., 426*, L51, doi:10.1086/187337
35. ***Bagenal**, F. (1994), Empirical model of the Io plasma torus: Voyager measurements, *J. Geophys. Res.*, 99, 11043-11062, doi:10.1029/93JA02908

36. Waite, J. H., **Bagenal**, F., Seward, F., Na, C., Gladstone, G. R., Cravens, T. E., Hurley, K. C., Clarke, J. T., Elsner, R., & Stern, S. A. (1994), ROSAT observations of the jupiter aurora, *J. Geophys. Res.*, 99, 14799-14810, doi:10.1029/94JA01005
37. Leblanc, Y., Dulk, G. A., & **Bagenal**, F. (1994), On Io's excitation and the origin of Jupiter's decametric radiation., *Astronomy & Astrophysics, 290*, 660-673, doi:
38. Morgan, D. D., Gurnett, D. A., Kurth, W. S., & **Bagenal**, F. (1994), The source of Jovian auroral hiss observed by Voyager 1, *J. Geophys. Res.*, 99, 21213-21224, doi:10.1029/94JA01904
39. Mei, Y., Thorne, R. M., & **Bagenal**, F. (1995), Analytical model for the density distribution in the Io plasma torus., *J. Geophys. Res.*, 100, 1823-1828, doi:10.1029/94JA02359
40. ***Bagenal**, F. (1995), Planetary magnetospheres: 1991-1993, *Surveys in Geophysics, 16,* 443-456, doi:10.1007/BF01044575
41. Taylor, M. H., Schneider, N. M., **Bagenal**, F., Sandel, B. R., Shemansky, D. E., Matheson, P. L., & Hall, D. T. (1995), A comparison of the Voyager 1 ultraviolet spectrometer and plasma science measurements of the Io plasma torus, *J. Geophys. Res.*, 100, 19541-19550, doi:10.1029/95JA01129
42. # Gibson, S. E., & **Bagenal**, F. (1995), Large-scale magnetic field and density distribution in the solar minimum corona, *J. Geophys. Res.*, 100, 19865-19880, doi:10.1029/95JA01905
43. # Crary, F. J., **Bagenal**, F., Ansher, J. A., Gurnett, D. A., & Kurth, W. S. (1996), Anisotropy and proton density in the Io plasma torus derived from whistler wave dispersion, *J. Geophys. Res.*, 101, 2699-2706, doi:10.1029/95JA02212
44. # Gibson, S. E., **Bagenal**, F., & Low, B. C. (1996), Current sheets in the solar minimum corona, *J. Geophys. Res.*, 101, 4813-4824, doi:10.1029/95JA03477
45. ***Bagenal**, F. (1997), The ionization source near Io from Galileo wake data, *Geophys. Res. Lett.,* 24, 2111-2114, doi:10.1029/97GL02052
46. ***Bagenal**, F., Crary, F. J., Stewart, A. I. F., Schneider, N. M., Gurnett, D. A., Kurth, W. S., Frank, L. A., & Paterson, W. R. (1997), Galileo measurements of plasma density in the Io torus, *Geophys. Res. Lett.,* 24, 2119-2122, doi:10.1029/97GL01254
47. # Crary, F. J., & **Bagenal**, F. (1997), Coupling the plasma interaction at Io to Jupiter, *Geophys. Res. Lett.,* 24, 2135-2138, doi:10.1029/97GL02248
48. Huddleston, D. E., Strangeway, R. J., Warnecke, J., Russell, C. T., Kivelson, M. G., & **Bagenal**, F. (1997), Ion cyclotron waves in the Io torus during the Galileo encounter: Warm plasma dispersion analysis, *Geophys. Res. Lett.,* 24, 2143-2146, doi:10.1029/97GL01203
49. ***Bagenal**, F. (1998), Introduction to the special section: Magnetospheres of the outer planets, *J. Geophys. Res.*, 103, 19841-19842, doi:10.1029/98JE01810
50. #Crary, F. J., & **Bagenal**, F. (1998), Remanent ferromagnetism and the interior structure of Ganymede, *J. Geophys. Res.*, 103, 25757-25774, doi:10.1029/98JE02497
51. #Crary, F. J., **Bagenal**, F., Frank, L. A., & Paterson, W. R. (1998), Galileo plasma spectrometer measurements of composition and temperature in the Io plasma torus, *J. Geophys. Res.*, 103, 29359-29370, doi:10.1029/1998JA900003
52. #Gibson, S. E., Fludra, A., **Bagenal**, F., Biesecker, D., del Zanna, G., & Bromage, B. (1999), Solar minimum streamer densities and temperatures using Whole Sun Month coordinated data sets, *J. Geophys. Res.*, 104, 9691-9700, doi:10.1029/98JA02681
53. #Crary, F. J., & **Bagenal**, F. (2000), Ion cyclotron waves, pickup ions, and Io's neutral exosphere, *J. Geophys. Res.*, 105, 25379-27066, doi:10.1029/2000JA000055
54. **Bagenal**, F. (2001), Foreword, *J. Geophys. Res.*, 106, 26117-26120, doi:10.1029/2001JA002500
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