James A. Slavin

Professor of Space Physics

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RESEARCH: Space Plasma Physics; Solar wind Interactions with Planets and Comets; Space-borne Fields and Particles Instrumentation; Space Mission Design and Management.

EDUCATION:

1982 - Ph.D., Space Physics, University of California at Los Angeles
Dissertation: *Bow Shock Studies at Mercury, Venus, Earth and Mars with Applications to the Solar – Planetary Interaction Problem*; Advisor: Prof. Robert E. Holzer
1978 - M.S., Geophysics and Space Physics, University of California at Los Angeles
1976 - B.S., Physics, Case Western Reserve University

APPOINTMENTS:

2011 - Professor of Space Physics
2011 - 2018 Chair, Dept. of Amospheric, Ocenaic and Space Sciences University of Michigan
2005 - 2011 Director, Heliophysics Science Division
1990 - 2004 Head, Electrodynamics Branch
1987 - 1989 Staff Scientist, NASA/GSFC Laboratory for Extraterrestrial Physics
1986 - 1987 Discipline Scientist for Magnetospheric Physics, NASA Headquarters
1983 - 1986 Staff Scientist, Astrophysics and Space Physics Section, Caltech/Jet Propulsion Laboratory

HONORS:

2018 - Heliophysics Summer School Faculty, UCAR High Altitude Observatory
2017 - NASA Group Achievement Award, MESSENGER Project Team
2017 - Asia Oceania Geosciences Society 14th Annual Meeting Distinguished Lecturer in Planetary Sciences
2016 - NASA Group Achievement Award, MMS Instrument Suite
2012 - International Academy of Astronautics Laurels for Team Achievement for MESSENGER
2012 - Fellow, American Geophysical Union
2009 - NASA Group Achievement Award, MESSENGER Mission
2008 - NASA Exceptional Achievement Medal for Space Technology 5
2007 - NASA Group Achievement Award, Space Technology-5
2006 - NASA Certificate of Appreciation for Excellence in

Leadership as Space Technology 5 Project Scientist
2006 - University of California Regent's Lectureship in Space Physics
2004 - NASA Exceptional Achievement Medal for Role of Magnetic Reconnection in Magnetospheric Substorms
2004 - NASA Group Achievement Award, Cluster Mission
2000 - NASA Group Achievement Award, Sun-Earth Connection 2000 Roadmap Team
1998 - Publishers Association Award for Best Physics and Astronomy Book of 1998 for "New Perspectives in Magnetotail Physics"
1998 - NASA Group Achievement Award, WIND MFI Team
1995 - NASA Group Achievement Award, WIND Magnetic Fields Investigation
1986 - NASA Group Achievement Award, International Cometary Explorer Magnetometer Team
1982 - National Research Council Resident Research Associate NASA Jet Propulsion Laboratory
1981 - NASA Group Achievement Award, Pioneer Venus Orbiter Magnetometer Team

CLASSROOM TEACHING:

SPACE 501 Planetary Magnetospheres Journal Club
SPACE 582 Spacecraft Technology
SPACE 583 Space Systems Management
SPACE 590 Student Projects
SPACE 595 Magnetospheric Physics
SPACE 747 Student Seminar

DOCTORAL COMMITTEES:

2023 Charles Bowers, Unv. of Michigan (Chair, est)
2023 Brett McQuen, Univ. of Michigan (Member, est)
2022 Huy-Sinh Trung, Univ. of Michigan (Member)
2021 Camilla D. K. Harris, Univ. of Michigan (Co-Chair)
2021 Sergio E. V. Luengo, Univ. of Michigan (Member)
2021 Yash Sarkango, Univ of Michigan (Member)
2020 Ryan M. Dewey, Univ. of Michigan (Co-Chair)
2019 Daniel Vech, Univ. of Michigan (Member)
2019 Mojtaba Akhavan-Tafti, Univ. of Michigan (Chair)
2019 Benjamin Alderman, Univ. of Michigan (Member)
2019 Patrick Belancourt, Univ of Michgian (Member)
2018 Doğa Can Su Öztürk, Univ. of Michigan (Co-Chair)
2017 Gangkai Poh, Univ. of Michigan (Chair)
2017 Yuxi Chen, Univ. of Michigan (Member)
2015 A. H. Sulaiman, Imperial College (Co-Chair)
2014 Gina A. DiBraccio, Univ. of Michigan (Chair)
2013 Jim M. Raines, Univ. of Michigan (Co-Chair)
2013 Shannon M. Curry, Univ. of Michigan (Member)
2009 Adam Masters, Imperial College (Co-Chair)
1996 Esa Kallio, University of Helsinki (Opponent)

1993 Mark B. Moldwin, Boston University (Member)

POST-DOCTORAL SCIENTISTS: 2019 - 2021 M. Akhavan-Tafti (PhD. Univ. Michigan)
2018 - 2021 W.-J. Sun (PhD. Peking Univ.)
2017 - 2018 G.-K. Poh (Ph.D. Univ of Michigan)
2015 - 2017 J. M. Jasinski (Ph.D. Univ. College London)
2011 - 2013 D. J. Gershman (Ph.D. Univ. of Michigan)
2010 - 2012 T. K. Sundberg (Ph.D. Royal Tech. Univ. Stockholm)
2008 – 2011 S. M. Imber (Ph.D. Univ. of Leicester)
2007 – 2011 M. Sarantos (Ph,D. Rice University)
2002 – 2005 E. I. Tanskanen (Ph.D. Univ. of Helsinki)
1996 - 1998 M. C. Collier (Ph.D. Univ. of Maryland)
1996 – 1999 S. Taguchi (Ph.D. Univ. of Kyoto)
1993 - 1995 M. M. Kuznetsova (Ph.D. Moscow State Univ., Space Research Institute)
1992 - 1995 J. J. Moses (Ph.D. Univ. of California at Los Angeles)
1990 – 1992 C. J. Owen (Ph.D. Imperial College)

PRIMARY AUTHOR JOURNAL ARTICLES
(Total 481 Papers; 25,000+ citations; h-index 81)

62. **Slavin, J. A**., S. M. Imber and Jim M. Raines (2021). A Dungey Cycle in the Life of Mercury's Magnetosphere, pp. 537 – 556; in Space Physics and Aeronomy Collection Volume 2: *Magnetospheres in the Solar System*, Geophysical Monograph 259, First Edition. Edited by Romain Maggiolo, Nicolas André, Hiroshi Hasegawa, and Daniel T. Welling. © 2021 American Geophysical Union. Published 2021 by John Wiley & Sons, Inc. DOI: 10.1002/9781119815624.ch34

61. **Slavin, J. A.,** Middleton, H. R., Raines, J. M., Jia, X., Zhong, J., Sun, W. J., ... & Mays, M. L. (2019). MESSENGER observations of disappearing dayside magnetosphere events at Mercury. *Journal of Geophysical Research: Space Physics*, *124*(8), 6613-6635.

60. **Slavin, J. A.,** D. N. Baker, D. J. Gershman, G. Ho, S. M. Imber, S. M. Krimigis, and T. Sundberg (2018), Mercury's Dynamic Magnetosphere, in *Mercury: The view after MESSENGER*, S. C. Solomon, L. R. Nittler, and B. J. Anderson (Eds.), (Chapter 17, pp. 461–496). London: Cambridge Univ.Press. ISBN: 978-1107154452

59. **Slavin, J. A.,** G. A. DiBraccio, D. J. Gershman, S. Imber, G. K. Poh, J. Raines, T. H. Zurbuchen, X. Jia, D. N. Baker, S. A. Boardsen, T. Sundberg, A. Masters, C. L. Johnson, R. M. Winslow, B. J. Anderson, H. Korth, G. Ho, S. M. Krimigis, R. L. McNutt, Jr, and S. C. Solomon (2014), MESSENGER Observations of Mercury's Dayside Magnetosphere Under Extreme Solar Wind Conditions, *J. Geophys. Res. Space Physics, 119*, doi:10.1002/2014JA020319.

58. **Slavin, J. A.,** S. M. Imber, S. A. Boardsen, G. A. DiBraccio, T. Sundberg, M. Sarantos, T. Nieves-Chinchilla, A. Szabo, B. J. Anderson, H. Korth, T. H. Zurbuchen, J. M. Raines, C. L. Johnson, R. M. Winslow, R. M. Killen, R. L. McNutt, Jr., and S. C. Solomon (2012),

MESSENGER Observations of a Flux Transfer Shower at Mercury, *J. Geophys. Res.*, *117*, A00M06, doi:10.1029/2012JA017926.

57. **Slavin, J. A.** (2012), A Dynamic Twist in the Tail, ***Science***, *336*, 548 DOI: 10.1126/science.1221805.

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56. **Slavin, J. A.,** B. J. Anderson, D. N. Baker, M. Benna, S. A. Boardsen, R. E. Gold, G. C. Ho, S. M. Imber, H. Korth, S. M. Krimigis, R. L. McNutt, Jr, J. M. Raines, M. Sarantos, D. Schriver, S. C. Solomon, P. Trávníček, and T. H. Zurbuchen (2012), MESSENGER Flyby Observations of Magnetotail Structure and Dynamics at Mercury, *J. Geophys. Res., 117*, A01215, doi:10.1029/2011JA016900.

55. **Slavin, J. A**., B. J. Anderson, D. N. Baker, M. Benna, S. A. Boardsen, G. Gloeckler, R. E. Gold, G. C. Ho, H. Korth, S. M. Krimigis, R. L. McNutt, Jr., L. R. Nittler, J. M. Raines, M. Sarantos, D. Schriver, S. C. Solomon, R. D. Starr, P. M. Trávníček, T. H. Zurbuchen (2010), MESSENGER observations of extreme loading and unloading of Mercury's magnetic tail, ***Science***, *329*, 665-668.

54. **Slavin, J. A.,** R. P. Lepping, C. –C. Wu, B. J. Anderson, D. N. Baker, M. Benna, S. A. Boardsen, R. M. Killen, H. Korth, S. M. Krimigis, W. E. McClintock, R. L. McNutt Jr., M. Sarantos, D. Schriver, S. C. Solomon, P. Travnicek, and T. H. Zurbuchen (2010), MESSENGER observations of large flux transfer events at Mercury, Geophys. Res. Lett., **37**, L02105, doi:10.1029/2009GL041485.

53. **Slavin, J. A.,** M. H. Acuña, B. J. Anderson, S. Barabash, M. Benna, S. A. Boardsen, M. Fraenz, G. Gloeckler, R.E. Gold, G. C. Ho, H. Korth, S. M. Krimigis, R. L. McNutt, Jr., J.M. Raines, M. Sarantos, S. C. Solomon, T.-L. Zhang, and T. H. Zurbuchen (2009), MESSENGER and Venus Express observations of the solar wind interaction with Venus, *Geophys. Res. Lett.,* **36**, L09106, doi:10.1029/2009GL037876.

52. **Slavin, J. A.,** M. H. Acuna, B. J. Anderson, D. N. Baker, M. Benna, S. A. Boardsen, G. Gloeckler, R. E. Gold, G. C. Ho, H. Korth, S. M. Krimigis, R. L. McNutt, Jr., J. M. Raines, M. Sarantos, D. Schriver, S. C. Solomon, P. Trávníček, T. H. Zurbuch*en* (2009*)*, MESSENGER Observations of Magnetic Reconnection in Mercury's Magnetosphere, ***Science***, **324**, 606 – 610, doi:10.1126/science.1172011.

51. **Slavin, J. A.,** B. J. Anderson, T. H. Zurbuchen, D. N. Baker, S. M. Krimigis, M. H. Acuña, M. Benna, S. A. Boardsen, G. Gloeckler, R. E. Gold, G. C. Ho, H. Korth, R. L. McNutt, Jr., J. M. Raines, M. Sarantos, D. Schriver, S. C. Solomon, and P. Trávníček (2009), MESSENGER observations of Mercury's magnetosphere during northward IMF, *Geophys. Res. Lett.,* **36**, L02101, doi:10.1029/2008GL036158

50. **Slavin, J.A.,** M. H. Acuna, B. J. Anderson, D. N. Baker, M. Benna, G. Gloeckler, R. E. Gold, G. C. Ho, R. M. Killen, H. Korth, S. M. Krimigis, R. L. McNutt, Jr., L. R. Nittler, J. M. Raines, D. Schriver, S. C. Solomon, R. D. Starr, P. Trávníček, T. H. Zurbuchen (2008), Mercury's Magnetosphere after MESSENGER's First Flyby, ***Science,*****321**, 85 – 89, doi:10.1126/science.1159040.

49. **Slavin, J. A.,** G. Le, R. J. Strangeway, Y. Wang, S. A. Boardsen, M. B. Moldwin, and H. E. Spence (2008), Space Technology 5 multi-point measurements of near-Earth magnetic fields: Initial results, *Geophys. Res. Lett.*, **35**, L02107, doi:10.1029/2007GL031728.

48. **Slavin, J.A.,** S.M. Krimigis, M. H. Acuña, B.J. Anderson, D.N. Baker, P.L. Koehn, H. Korth, S. Livi, B.H. Mauk, S.C. Solomon, and T.H. Zurbuchen (2007), MESSENGER at Mercury: Exploring the Magnetosphere, *Space Sci. Rev.,* **131**: 133-160, doi:10.1007/s11214-007-9154-x

47. **Slavin, J.A**. (2005), Mars Aeronomy Orbiter and its Contribution to the Vision for Exploration, *Space 2005*, Long Beach, California, AIAA 2005-6824

46. **Slavin, J.A.,** E. Tanskanen, M. Hesse, C.J. Owen, M.W. Dunlop, S. Imber, E. Lucek, A. Balogh, and K.-H. Glassmeier (2005), Cluster observations of traveling compression regions in the near-tail, *J. Geophys. Res.*, **110**, A06207, doi:10.1029/2004JA010878

45. **Slavin, J.A.** (2004), Mercury's Magnetosphere, *Adv. Space Res*., **33**/11, 1587-1872, doi:10.1016/j.asr.2003.02.019

44. **Slavin, J.A.,** C.J. Owen, M.W. Dunlop, E. Borälv, M.B. Moldwin, D.G. Sibeck, E. Tanskanen, M.L. Goldstein, A. Fazakerley, A. Balogh, E. Lucek, I. Richter, H. Reme, and J.M. Bosqued (2003), Cluster four spacecraft measurements of small traveling compression regions in the near-tail, *Geophys. Res. Lett.,* **30**(23), 2208, doi:10.1029/2003GL018438.

43. **Slavin, J.A**., R.P. Lepping, J. Gjerloev, D.H. Fairfield, M.H. Acuna, M.L. Goldstein, A. Balogh, M. Dunlop, M.G. Kivelson, K. Khurana, A. Fazakerley, C.J. Owen, H. Reme and J.M. Bosqued (2003), Cluster measurements of electric current density within a flux rope in the plasma sheet, *Geophys. Res. Lett.,* **30**(7), 1362, doi:10.1029/2002GL016411.

42. **Slavin, J.A**., R.P. Lepping, J. Gjerloev, D.H. Fairfield, M. Hesse, C.J. Owen, M.B. Moldwin, T. Nagai, A. Ieda, and T. Mukai (2003), Geotail observations of magnetic flux ropes in the plasma sheet, *J. Geophys. Res*., **108**(A1), 1015, doi:10.1029/2002JA009557

41. **Slavin, J. A**., D. H. Fairfield, R. P. Lepping, M. Hesse, A. Ieda, E. Tanskanen, N. Østgaard, T. Mukai, T. Nagai, H. J. Singer, and P. R. Sutcliffe (2002), Simultaneous observations of earthward flow bursts and plasmoid ejection during magnetospheric substorms, *J. Geophys. Res*., **107**(A7), doi:10.1029/2000JA003501

40. **Slavin, J.A** (2001), Magnetospheres: Mercury, *Encyclopedia of Astronomy and Astrophysics*, ed. P Murdin, Institute of Physics Publishing/Macmillan, London

39. **Slavin, J.A.,** M. Hesse, C.J. Owen, S. Taguchi, D.H. Fairfield, R.P. Lepping, S. Kokubun, T. Mukai, A.T.Y. Lui, R. Anderson, H. Matsumoto and P.R. Sutcliffe (1999), Dual spacecraft observations of lobe magnetic field perturbations before, during and after plasmoid release, *Geophys. Res. Lett.,* **26**, 2,897

38. **Slavin, J.A.** (1998), Traveling Compression Regions, *New Perspectives in Magnetotail Physics*, eds. A. Nishida, S.W.H. Cowley and D.N. Baker, pp. 225-240, AGU Monograph, **105**, Washington, D.C.

37. **Slavin, J.A.,** D.H. Fairfield, M. Kuznetsova, C.J. Owen, R.P. Lepping, S. Taguchi, T. Mukai, Y. Saito, T. Yamamoto, S. Kokubun, A.T.Y. Lui, and G.D. Reeves (1998), ISTP observations of plasmoid ejection: IMP 8 and Geotail, *J. Geophys. Res.,* **103**, 119

36. **Slavin, J. A.,** C. J. Owen, J. E. P. Connerney, and S. P. Christon, Mariner 10 observations of field-aligned currents at mercury (1997), *Planet. Space Sci.*, **45**, 133

35. **Slavin, J.A**., D.H. Fairfield, R.P. Lepping, A. Szabo, M.J. Reiner, M. Kaiser, C.J. Owen, T. Phan, R. Lin, S. Kokubun, T. Mukai, T. Yamamoto, H. Singer, S. Romanov, J. Buechner, T. Iyemori, and G. Rostoker (1997), WIND, GEOTAIL and GOES 9 observations of magnetic field dipolarization and bursty bulk flows in the near-tail, *Geophys. Res. Lett.,* **24**, 971

34. **Slavin, J. A.,** A. Szabo, M. Peredo, C. J. Owen, R. P.Lepping, R. Fitzenreiter, K. W. Ogilvie, J. L. Steinberg, and A. J. Lazarus (1996), Near-simultaneous bow shock crossings by WIND and IMP 8 on December 1, 1994, *Geophys. Res. Lett.,* **23**, 1,207

33. **Slavin, J. A.,** C. J. Owen, M. M. Kuznetsova, and M. Hesse (1995), ISEE 3 observations of plasmoids with flux rope magnetic topologies, *Geophys. Res. Lett.,* **22**, 2,061

32. **Slavin, J. A.,** C. J. Owen, and M. Hesse (1994), The evolution of the plasmoid-lobe interaction with downtail distance, *Geophys. Res. Lett.,* **21**, 2,765

31. **Slavin, J. A**., M. Verigin, K. Gringauz, G. Kotova, S. Stahara, J. Spreiter, W. Riedler, K. Schwingenschuh, H. Rosenbauer, and S. Livi (1993), The solar wind interaction with Mars: Phobos-2 bow shock observations on 24 March, 1989, *Plasma Environment of Non-Magnetic Planets, COSPAR Colloquium Series*, **4**, pp. 279-283

30. **Slavin, J. A.,** M. F. Smith, E. L. Mazur, D. N. Baker, T. Iyemori, and E. W. Greenstadt (1993), ISEE-3 observations of traveling compression regions in the Earth's magnetotail, *J. Geophys. Res.*, **98**, 15,425, 1993.

29. **Slavin, J.A.,** M. F. Smith, E. L. Mazur, D. N. Baker, T. Iyemori, H. J. Singer, and E. W. Greenstadt (1992), ISEE-3 plasmoid and TCR observations during an extended interval of substorm activity, *Geophys. Res. Lett.,* **19**, 825

28. **Slavin, J. A**., K. Schwingenschuh, W. Riedler, and Ye. Yeroshenko (1991), The solar wind interaction with Mars: Mariner 4, Mars-2, 3 & 5, and Phobos-2 observations of bow shock position and shape, *J. Geophys. Res.,* **96**, 11,235

27. **Slavin, J. A.,** R. P. Lepping, and D. N. Baker (1990), IMP-8 observations of traveling compression regions: New evidence for near-Earth plasmoids and neutral lines, *Geophys Res. Lett.*, **17**, 913

26. **Slavin, J. A.,** D. N. Baker, J. D. Craven, R. C. Elphic, D. H. Fairfield, L. A. Frank,

A. B. Galvin, W. J. Hughes, R. H. Manka, D. G. Mitchell, I. G. Richardson, T. R. Sanderson, D. J. Sibeck, H. J. Singer, E. J. Smith, and R. D. Zwickl (1989), CDAW-8 observations of plasmoid signatures in the geomagnetic tail: An assessment, *J. Geophys. Res.*, **94,** 15,153

25. **Slavin, J. A.,** D. S. Intriligator, and E. J. Smith, Pioneer Venus Orbiter magnetic field and plasma observations within the Venus magnetotail (1989), *J. Geophys. Res.*, **94**, 2,383

24. **Slavin, J. A.,** P. W. Daly, E. J. Smith, T. R. Sanderson, K.-P. Wenzel, R. P. Lepping, and H.W. Kroehl (1987), Magnetic configuration of the distant plasma sheet: ISEE-3 observations, *Magnetotail Physics*, ed. A. T. Y. Lui, pp. 59-64, JHU Press, Baltimore

23. **Slavin, J. A**., E. J. Smith, P. W. Daly, K. R. Flammer, G. Gloeckler, B. A. Goldberg, D. J. McComas, F. L. Scarf, and J. L. Steinberg (1986), The P/Giacobini-Zinner Magnetotail, *Exploration of Halley's Comet*, ESA SP-250, Vol. I, pp. 81-87

22. **Slavin, J. A**., B. A. Goldberg, E. J. Smith, D.J. McComas, S.J. Bame, M.A. Strauss, and H. Spinrad (1986), The Structure of a Cometary Type I Tail: Ground-based and ICE Observations of P/Giacobini-Zinner, *Geophys. Res. Lett.*, **13**, 1,085

21. **Slavin, J. A**., G. Jungman, and E. J. Smith (1986), Interplanetary Magnetic Field Intensity during Solar Cycle 21: ISEE-3/ICE Observations, *Geophys. Res. Lett.*, **13**, 513

20. **Slavin, J. A**., E. J. Smith, B. T. Tsurutani, G. L. Siscoe, D. E. Jones, and D. A. Mendis (1986), Giacobini-Zinner Magnetotail: ICE Magnetic Field Observations, *Geophys. Res. Lett.*, **13**, *283*

19. **Slavin, J. A.,** E. J. Smith, D. G. Sibeck, D. N. Baker, R. D. Zwickl, S.-I. Akasofu, and R. P. Lepping (1986), Solar Wind- Magnetosphere Coupling and the Distant Magnetotail, *Solar Wind-Magnetosphere Coupling*, eds. Y. Kamide and J. A. Slavin, pp. 717 -730, Terra-Reidel, Tokyo

18. **Slavin, J. A**., E. J. Smith, D. G. Sibeck, D. N. Baker, R. D. Zwickl, and S.-I. Akasofu (1985), An ISEE-3 study of average and substorm conditions in the distant magnetotail, *J. Geophys. Res.*, **90**, A11,10,875–10,895.

17. **Slavin, J. A**., E. J. Smith, J. R. Spreiter, and S. S. Stahara (1985), Gasdynamic Modeling of the Jovian and Saturnian Bow Shocks: Solar Wind Flow About the Outer Planets, *J. Geophys. Res.*, **90**, 6,275.

16. **Slavin, J. A.,** E. J. Smith, and D. S. Intriligator (1984), A comparative study of distant magnetotail structure at Venus and Earth, *Geophys. Res. Lett.*, **11**, 1,074

15. **Slavin, J. A.,** R. E. Holzer, J. R. Spreiter, and S. S. Stahara (1984), Planetary mach cones: theory and observation, *J. Geophys. Res.*, **89**, 2,708

14. **Slavin, J. A.,** E. J. Smith, B. T. Tsurutani, D. G. Sibeck, H. J. Singer, D. N. Baker, J. T. Gosling, E. W. Hones, and F. L. Scarf (1984), Substorm Associated Traveling Compression Regions in the Distant Tail: ISEE-3 Geotail Observations, *Geophys. Res. Lett.*, **11**, 657

13. **Slavin, J. A.,** E. J. Smith, and B. T. Thomas (1984), Large Scale Temporal and Radial Gradients in the IMF: Helios 1, 2, ISEE-3, and Pioneer 10, 11, *Geophys. Res. Lett.*, **11**, 279

12. **Slavin, J. A.,** B. T. Tsurutani, E. J. Smith, D. E. Jones, and D. G. Sibeck (1983), Average Configuration of the Distant Magnetotail: Initial ISEE-3 Magnetic Field Results, *Geophys. Res. Lett.*, **10**, 10, 973-976

11. **Slavin, J.A**., and E J. Smith (1983), Solar cycle variations in the interplanetary magnetic field, *Proceedings of Solar Wind 5 Conference*, ed. M. Neugebauer, pp. 323-331, NASA CP-2280, Washington, D.C.

10. **Slavin, J. A.,** E. J. Smith, P. R. Gazis, and J. D. Mihlov (1983), A Pioneer-Voyager study of the solar wind interaction with Saturn, *Geophys. Res. Lett.*, **10**, 1, 9-12

9. **Slavin, J. A**., R. E. Holzer, J. R. Spreiter, S. S. Stahara, and D. S. Chaussee (1983), Solar wind flow about the terrestrial planets, 2. Comparisons with gasdynamic theory and implications for solar-planetary interactions, *J. Geophys. Res.*, **88**, 19

8. **Slavin, J. A.,** and R. E. Holzer (1982), The solar wind interaction with Mars revisited, *J. Geophys. Res.*, **87**, 10,285

7. **Slavin, J. A.,** and R. E. Holzer (1981), Solar wind flow about the terrestrial planets, 1. modeling bow shock position and shape, *J. Gophys. Res.*, **86**, A13, 11,401-11,418.

6. **Slavin, J. A**., R. C. Elphic, C. T. Russell, F. L. Scarf, J. H. Wolfe, J. D. Mihalov, D. S. Intriligator, L. H. Brace, H. A. Taylor, Jr., and R. E. Daniell, Jr. (1980), The solar wind interaction with Venus: Pioneer Venus Observations of bow shock location and structure, *J. Geophys. Res.*, **85**, 7,625

5. **Slavin, J.A**., and R.E. Holzer (1979), Empirical relationships between interplanetary conditions, magnetospheric flux transfer, and the AL index, *Quantitative Modelling of Magnetospheric Processes*, ed. W. P. Olson, pp. 423-435, AGU, Washington, D.C.

4. **Slavin, J. A.,** and R. E. Holzer (1979), On the Determination of the Hermaean Magnetic Moment: A critical review, *Phys. Earth Planet. Interiors*, **20**, 231

3. **Slavin, J. A**., R. C. Elphic, and C. T. Russell (1979), A comparison of Pioneer Venus and Venera bow shock observations: Evidence for a solar cycle variation, *Geophys. Res. Lett.*, **6**,905

2. **Slavin, J. A.,** R. C. Elphic, C. T. Russell, J. H. Wolfe, and D. S. Intriligator (1979), Position and shape of the Venus bow shock: Pioneer Venus Orbiter observations, *Geophys. Res. Lett.*,**6**, 901

1. **Slavin, J. A**., and R. E. Holzer (1979), The effect of erosion on the solar wind stand-off distance at Mercury, *J. Geophys. Res.*, **84**, 2,076-2,082.

UNIV. MICHIGAN SERVICE:

2022 -	CoE Disciplinary Committee
2021 -	CLaSP Alumni and Friends Committee
2020 -	CLaSP Awards Committee
2018 - 2020	Chair, CLaSP Mentoring Committee
2017 - 2018	Shared Services Center Administrative Council – CoE Representative
2013 - 2015	Oversight Committee for Research and Data CoE Representative
2013	College of Engineering Awards Committee
2011 - 2018	Chair, Dept. Climate and Space Sciences & Engineering

EDITORIAL SERVICE:

2018 - 2021	Springer Editorial Board, Atmosphere, Earth, Ocean and Space (AEONS) Series
1997- 2013	Foreign Editor, *Journal of Earth, Spac, and Planets*
1998	Co-Editor (with J.B. Blake) *Particle Acceleration in Space Plasmas, Adv. Space Res., 21*, No. 4
1994-1998	Associate Editor, *J. Geophysical Research*
1992-1997	Associate Editor, *Reviews of Geophysics*
1986	Co-Editor, *Solar Wind - Magnetosphere Coupling*, Terra-Reidel Pub, Tokyo

NASA PROJECT LEADERSHIP:

1998-2008	Senior Project Scientist, Solar Terrestrial Probes
2006-2007	Project Scientist, Magnetospheric MultiScale Mission
1999-2006	Project Scientist, New Millenium Program Space Technology - 5 Micro-satellite Constellation Mission
1989-1991	Project Scientist, ISTP/POLAR
1989-1991	Study Scientist, Mercury Orbiter
1984-1986	Study Scientist, Mars Aeronomy Observer

NASA INSTRUMENT TEAM SERVICE:

2015 - Europa PIMS Investigation (NASA)
2013 - JUICE Magnetic Fields Investigation (ESA)
2009 - BepiColombo STROFIO Investigation (ESA)
2005 - MMS SMART Investigation (NASA)
2004 - BepiColombo MERMAG Investigation (ESA)
1999 - MESSENGER Mission (NASA)
1997 - IMP 8 Magnetic Field Investigation (NASA)
1994 - Mars Global Surveyor MAG-ER Investigation (NASA)
1992 - Mars Observer MAG-ER Investigation (NASA)
1990 - Mars-96 MAREMF Investigation (IKI-Russia)
1990 - ESA Polar Platform Advanced Particles and Fields Observatory (NASA)
1989 - EOS Geomagnetic Observing System (NASA)
1989 - ISTP/WIND Magnetic Fields Investigation (NASA)

1989 - Dynamics Explorer-1/2 Magnetic Field Investigation (NASA)
1988 - Phobos-1/2 Magnetometer Investigation (IKI-Russia)
1988 - Cluster Magnetic Fields Investigation (ESA)
1987 - ISEE-3/ICE Magnetic Fields Investigation (NASA)
1986 - CRAF Magnetic Fields Investigation (NASA)
1983 - Pioneer Venus Orbiter Magnetometer Investigation (NASA)

EXTERNAL SERVICE:

2015 - 2017	Steering Committee for NASA's Living with a Star Program
2009 - 2011	Member, Virginia Tech Center for Space Science and Engineering Research Advisory Panel
2008	Member, Visiting Review Panel, University College of London, Mullard Space Science Laboratory
2008 - 2011	Member, Planetary Science Sub-Committee of NASA's Science Advisory Council
2005	Member, Advanced Planning and Integration Office Sun-Solar System Connection Roadmap Panel
2003	Co-Chair, GSFC Magnetics Facility Workshop
2001	Sun-Earth Connections Lead, Deep Space Network 70 meter Receiver Science Workshop
2000 - 2004	Member, NASA HQ Geospace Science MOWG
2000	Co-Convenor, LWS Measurement Requirements Workshop
1999 - 2000	Co-Chair, SEC 2000 Roadmap Team
1999	Member, Committee of Visitors, NSF Upper Atmosphere Research Section
1995-1998	Member, Tellers Committee, American Geophysical Union
1995-1996	Member, Mercury Sub-committee, Terrestrial Planets Science Working Group
1993-1996	Co-Chair, COSPAR Sub-Commission D.3 on Planetary Magnetospheres
1991-1992	Solar-Terrestrial Physics Group Leader, National Academy of Sciences Geomagnetism Initiative Workshop
1990-1991	Member, Magnetospheres Panel, NASA HQ Space Physics Strategy-Implementation Study
1989-1993	Co-Chair, COSPAR Sub-Commission D.2 on Mars Plasma Environment
1985-1986	Co-Convenor, AGU Chapman Conference on Solar Wind-Magnetosphere Coupling

PROFESSIONAL SOCIETIES:

American Geophysical Union
American Astronomical Society/Division Planetary Sciences

American Association for the Advancement of Science
American Institute of Aeronautics and Astronautics

ALL SCIENTIFIC JOURNAL PUBLICATIONS
(25,000+ citations; h-index = 81)

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