Krishan Khurana
Publications

Last update: 30 August 2010

Publications in exploration geophysics

1. Pal P. C., K. K. Khurana, and P. Unnikrishnan, Two examples of spectral approach to source depth estimation in gravity and magnetics, *Pure and Applied Geophysics (Pageoph), 117*, 772, 1978--79.
2. Pal P. C. and K. K. Khurana, Comparison of correlogram and spectral approaches for optimal station spacing in magnetic surveys; Geophys. Res. Bulletin: N.G.R.I., India, 18, 193, 1980.
3. Khurana, K. K., S. V. Seshagiri Rao, and P. C. Pal, Frequency domain least-squares inversion of thick dike magnetic anomalies using Marquardt's algorithm, Geophysics, 46, 1745, 1981.

Publications in Space Physics

4. Khurana, K. K., M. G. Kivelson, T. P. Armstrong and R. J. Walker, Voids in Jovian magnetosphere revisited: Evidence of spacecraft charging, Journal of Geophysical Research, 92, 13399, 1987. 6A8859
5. Khurana K. K., and M. G. Kivelson, Ultra low frequency MHD waves in Jupiter's middle magnetosphere, Journal of Geophysical Research, 94, 5241, 1989a. 88JA04266
6. Khurana K. K., and M. G. Kivelson, On Jovian plasma sheet structure, Journal of Geophysical Research, 94, 11791, 1989b. 89JA00626
7. Kivelson M. G., C. F. Kennel, R. L. McPherron, C. T. Russell, D. J. Southwood, R. J. Walker, C. M. Hammond, K. K. Khurana, R. J. Strangeway, P. J. Coleman, Magnetic field studies of the solar wind interaction with Venus from the Galileo Flyby, Science, 254, 1518, 1991. 91Sci2531518
8. Khurana, K. K., S. H. Chen, C. M. Hammond and M. G. Kivelson, Ultralow frequency waves in the magnetotails of the Earth and the outer planets, Advances in Space Research, 12, (8) 57, 1992. 92ASR12857
9. Khurana K. K., A generalized hinged-magnetodisc model of Jupiter's nightside current sheet, Journal of Geophysical Research, 97, 6269, 1992. 92JA00169
10. Kivelson M. G., K. K. Khurana, J. D. Means, C. T. Russell, and R. C. Snare, The Galileo magnetometer investigation, Space Science Review, 60, 357, 1992. 92SSR357
11. Khurana K. K., and M. G. Kivelson, Inference of the angular velocity of plasma in the Jovian magnetosphere from the sweepback of magnetic field, J. Geophys. Res., 98, 67, 1993. 92JA01890
12. Khurana, K. K., ULF waves in other magnetospheres -- observations and possible source mechanisms, Ann. Geophysicae, 11, 973, 1993. 93AG11973
13. Kivelson, M. G, C. F. Kennel, R. L. McPherron, C. T. Russell, D. J. Southwood, R. J. Walker, K. K. Khurana, P. J. Coleman, C. M. Hammond, V. Angelopoulos, A. J. Lazarus, and R. P. Lepping, The Galileo Earth Encounter: The magnetometer and allied measurements, J. Geophys. Res., 98, 11,299, 1993. 92JA03001
14. Kivelson, M. G., L. F. Bargatze, K. K. Khurana, D. J. Southwood, R. J. Walker, and P. J. Coleman, Jr., Magnetic field signatures near Galileo's closest approach to Gaspra, Science, 261, 331, 1993. 93Sci261331
15. Khurana , K. K., and M. G. Kivelson, A variable cross-section model of the bow shock of Venus, J. Geophys. Res., 99, 8505, 1994. 93JA0357
16. Kivelson, M. G., A. Prevost, F. V. Coroniti, K. K. Khurana, and D. J. Southwood, Galileo Flybys of Earth: The nature of distant shock, Adv. Space Res., 16, (4)197, 1995. ASR161971995
17. Wang, Z., M. G. Kivelson, S. Joy, K. K. Khurana, C. Polanskey, D. J. Southwood and R. J. Walker, Solar wind interaction with small bodies: 1. Whistler wing signatures near Galileo's closest approach to Gaspra and Ida, Adv. Space Res., 16, (4) 47, 1995. ASR16471995
18. Kivelson, M. G., Z. Wang, S. Joy, K. K. Khurana, C. Polanskey, D. J. Southwood and R. J. Walker, Solar wind interaction with small bodies: 2. What can Galileo's detection of magnetic rotations tell us about Gaspra and Ida, Adv. Space Res., 16, (4)59, 1995. ASR16591995
19. Khurana, K. K., M. G. Kivelson, L. A. Frank, and W. R. Paterson, Observations of magnetic flux ropes and associated currents in Earth's magnetotail with the Galileo spacecraft, Geophys. Res. Letters, 22, pp. 2087-2090, 1995. 95GL01518
20. Khurana, K. K., M. G. Kivelson, and L. A. Frank, The relationship of magnetic flux ropes to substorms, Adv. Space Res., 18, 59, 1995. ASR185995
21. Kivelson, M. G., and K. K. Khurana, Models of flux ropes embedded in a Harris neutral sheet: Force free solutions in low and high beta plasmas, in press, J. Geophys. Res., 100, 23,637, 1995. 95JA01548

22. Kivelson, M.G., K.K. Khurana, R. J. Walker, E. L. Kepko, D. Xu, Flux ropes, Interhemispheric conjugacy, and Magnetospheric current closure, J. Geophys. Res., 101, 27341, 1996. 96JA02220
23. Khurana K. K., R. J. Walker, T. Ogino, Magnetospheric convection in the presence of IMF By: A conceptual model and simulations, J. Geophys. Res., 101, pp. 4907-4916, 1996a. 95JA03673
24. Kepko, E. L., K. K. Khurana, M. G. Kivelson, R. C. Elphic and C. T. Russell, Accurate determination of magnetic field gradients from four point vector measurements: 1. Use of natural constraints on vector data obtained from a single spinning spacecraft, IEEE Trans. Magnetics, 32, pp. 377-385, 1996. IEEE32377
25. Kivelson, M.G., K. K. Khurana, Z. Wang, Models of flux ropes in the magnetotail, Physics of Space Plasmas, Proceedings of the 1995 Symposium/Workshop in Geoplasma Physics on "Multiscale Phenomena in Space Plasmas, Edited by T. Chang and J. R. Jaspers, MIT Center for Theoretical Geo/Cosmo Plasma Physics, pp. 287-298, 1996a. PSP142871995
26. Khurana K.K., M. G. Kivelson, Jovian magneto-spheric field as measured by Pioneers 10 & 11 and Voyagers 1 & 2: A compendium, IGPP Internal Report, 1996b.
27. Khurana, K. K., E. L. Kepko, M. G. Kivelson, and R. C. Elphic, Accurate determination of magnetic field gradients from four point vector measurements: 2. Use of natural constraints on vector data obtained from four spinning spacecraft, IEEE Trans. Magnetics, 32, 5193, 1996c. IEEE32519396
28. Grun, E., M. Baguhl, R. Riemann, H. A. Zook, S. Dermott, H. Fechtig, B.A. Gustafson, D. Hamilton, M. S. Hanner, M. Horanyi, K.K. Khurana, J. Kissel, M. Kivelson, B.A. Lindblad, D. Linkert, I. Mann, J.A.M. McDonnell, G. E. Morfill, C. Polanskey, G. Schwehm, and R. Srama, Constraints from Galileo observations on the origin of Jovian dust streams, Nature, 381, 395, 1996. N381395a0
29. Kivelson, M. G., Khurana, K. K., Walker, R. J., Russell, C. T., Linker, J. A., Southwood, D. J., Polanskey, C., A Magnetic Signature at Io: Initial Report from the Galileo Magnetometer, Science, 273, 337-340, 1996b. Sci273337
30. Kivelson, M. G., Khurana, K. K., Walker, R. J., Warnecke, J., Russell, C. T., Linker, J. A., Southwood, D. J., Polanskey, C., Io's Interaction with the Plasma Torus: Galileo Magnetometer Report, Science, 274, 5286, 396-398, 1996c. Sci274396
31. Kivelson, M. G., Khurana, K.K., Russell, C. T., Walker, R.J., Warnecke, J., Coroniti, F.V., Polanskey, C., Southwood, D. J., Schubert, G., Discovery of Ganymede's Magnetic Field by the Galileo Spacecraft, Nature, 384, 537, 1996d. N384537
32. Shue, J.-H., Chao, J.K., Fu, H. C., Russell, C. T., Song, P., Khurana, K.K., Singer, H.J., A New Functional Form to Study the Solar Wind Control of the Magnetopause Size and Shape, J. Geophys. Res., 102, 9497-9511, 1997. 97JA00196
33. Kivelson, M. G., K. K. Khurana, C. T. Russell,; R. J. Walker, Intermittent short-duration magnetic field anomalies in the Io torus: Evidence for plasma interchange? Geophys. Res. Lett. 24, 2127, 1997a. 97GL02202
34. Warnecke, J., M. G. Kivelson, K. K. Khurana, , D. E. Huddleston, C. T. Russell, Ion cyclotron waves observed at Galileo's Io encounter: Implications for neutral cloud distribution and plasma composition, Geophys. Res. Lett., 24, 2139, 1997. 97GL01129
35. Kivelson, M. G., K. K. Khurana, F. V. Coroniti, S. Joy, C. T. Russell, R. J. Walker, J. Warnecke, L. Bennett, C. Polanskey, The magnetic field and magnetosphere of Ganymede, Geophys. Res. Lett. 24, 2155,1997b. (IGPP Pub. No. 4865.) 97GL02201
36. Khurana, K.K., Euler Potential Models of Jupiter's Magnetospheric Field. J. Geophys. Res. 102 (A6): p. 11295-11306, 1997. (IGPP Publ. No. 4623). 97JA00563
37. Khurana, K. K., Kivelson, M. G., C. T. Russell, R. J. Walker, D. J. Southwood, Absence of an Internal Magnetic-Field At Callisto, Nature, 387, 262-264, 1997a. N387262a0
38. Kivelson, M. G., Khurana, K.K., Joy, S., Russell, C. T., Walker, R.J., Polanskey, C., Europa's Magnetic Signature: Report from Galileo's First Pass on December 19, 1996, Science,. 276, 1997c. Sci2761239
39. Khurana, K.K., Kivelson, M. G., Russell, C. T., Interaction of Io with its Torus: Does Io have an Internal Magnetic Field?, Geophys. Res. Letter, 19, 2391, 1997b. 97GL02507
40. Huddleston, D.E., C.T. Russell, M.G. Kivelson, K.K. Khurana, and L. Bennett, The location of the Jovian bow shock and magnetopause: Galileo initial results, Adv. Space Res., 21, 1463, 1998. (IGPP Pub. No. 4899) ASR211463
41. Bennett, L., Kivelson, M. G., Khurana, K.K., Frank, L. A., Paterson, W.R., A Model of the Earth's Distant Bow Shock, J. Geophys. Res., 102, 26927-26941, 1997. 97JA01906
42. Kivelson M. G., K. K. Khurana, C. T. Russell, R. J. Walker, P. J. Coleman, F. Coroniti, J. Green, S. Joy, R. L. McPherron, C. Polanskey, D. J. Southwood, Galileo at Jupiter: Changing states of the magnetosphere and first look at Io and Ganymede, Adv. Space Res., 20, 193-204, 1997d. ASR20193
43. Khurana, K. K., J.A. Linker, M.G. Kivelson, and C.T. Russell, Alfven wing currents at Io: Reply, Geophys. Res. Lett, 1998a. (IGPP Pub. No. 5079). [[JPL 958694]] 98GL01586

44. Khurana K. K, E. L. Kepko, and M. G. Kivelson, Measuring magnetic field gradients from four point vector measurements in space, Monograph on Measurement Techniques for Space Plasmas, American Geophys. Union, Washington, D. C., page 311-316, 1998b. (IGPP publication number 4602). Mono103311
45. Khurana, K.K., M.G. Kivelson, D.J. Stevenson, G. Schubert, C.T. Russell, R.J. Walker, S. Joy, C. Polanskey, Induced magnetic fields as evidence for subsurface oceans in Europa and Callisto, Nature, 395, 777, 1998c. (IGPP Publication No. 5095). N395777
46. Russell, C.T., Khurana, K.K., Huddleston, D.E., Kivelson, M.G., Localized Reconnection in the Near Jovian Magnetotail, Science, Vol. 280, pp. 1061-1064, 1998 (IGPP publication number 5100). [[JPL 958694, JPL 958510]] Sci2801061
47. Perraut, S., A. Roux, P Louarn, D. A. Gurnett, W. S. Kurth, and K. K. Khurana, Mode conversion at the Jovian plasma sheet boundary, J. Geophys. Res., 103, 14,995, 1998. 97JA02879
48. Huddleston, D.E., C.T. Russell, M.G. Kivelson, K.K. Khurana, and L. Bennett, Location of the Jovian bow shock and magnetopause: Galileo initial results, Adv. Space Res., 21, 1463, 1998. (IGPP Pub. No. 4899) [[JPL 958694, JPL 958510]] ASR211463
49. Linker, J.A., K.K. Khurana, M.G. Kivelson, and R.J. Walker, MHD simulations of Io's interaction with the plasma torus, Geophys. Res., 103, 19,867, 1998. (IGPP Pub. No. 5011) [[JPL 958694]] 98JE00632
50. Kivelson, M.G., J. Warnecke, L. Bennett, S. Joy, K.K. Khurana, J.A. Linker, C.T. Russell, R.J. Walker, and C. Polanskey, Ganymede's magnetosphere: Magnetometer overview, J. Geophys. Res., 103, 19,963, 1998. (IGPP Publication No. 4931) 98JE00227
51. Russell, C.T., D.E. Huddleston, K.K. Khurana, and M.G. Kivelson, The fluctuating magnetic field in the middle Jovian magnetosphere: Initial Galileo Observations, Planet. Space Sci., 47, 133, 1999. (IGPP Publication No. 5262) PSS47133
52. Russell, C.T., M.G. Kivelson, K.K. Khurana, and D.E. Huddleston, Magnetic fluctuations close to Io: Ion cyclotron and mirror mode wave properties, Planet. Space Sci., 47, 143, 1999. (IGPP Publication No. 5250) [[JPL 958694, JPL 958510]] PSS47143
53. Kivelson, M.G., K.K. Khurana, D.J. Stevenson, L. Bennett, S. Joy, C.T. Russell, R.J. Walker, C. Zimmer, and C. Polanskey, Europa and Callisto: Induced or intrinsic fields in a periodically varying plasma environment, J. Geophys. Res., 104, 4609, 1999. (IGPP Publication No. 5086). [[JPL 958694]] 1998JA900095
54. Russell, C.T., D.E. Huddleston, K.K. Khurana, and M.G. Kivelson, Observations at the inner edge of the Jovian current sheet: Evidence for a dynamic magnetosphere, Planet. Space Sci., 47, 521, 1999. (IGPP Publication No. 5267) [[JPL 958694, JPL 958510]] PSS47521
55. Volwerk, M., M.G. Kivelson, K.K. Khurana, and R.L. McPherron, Probing Ganymede's magnetosphere with field line resonances, J. Geophys. Res., 104, 14,729, 1999. (IGPP Pub. No. 5105) 1999JA900161
56. Huddleston, D.E., R.J. Strangeway, X. Blanco-Cano, C.T. Russell, M.G. Kivelson, and K.K. Khurana, Mirror mode structures at the Galileo-Io flyby: Instability criterion and dispersian analysis, J. Geophys. Res., 104, 17,479, 1999. (IGPP Publication No. 5072) [[JPL 958694, JPL 958510]] 1999JA900195
57. Russell, C.T., D.E. Huddleston, K.K. Khurana, and M.G. Kivelson, Structure of the Jovian magnetodisk current sheet: Initial Galileo observations, Planet. Space Sci., 47, 1101, 1999. (IGPP Publication No. 5423) PSS471101
58. Woch, J., N. Krupp, K.K. Khurana, M.G. Kivelson, A. Roux, S. Perraut, P. Louarn, A. Lagg, D.J. Williams, S. Livi, and B. Wilken, Plasma Sheet Dynamics in the Jovian Magnetotail: Signatures for Substormlike Processes? Geophys. Res. Lett., 14, 2137, 1999. 1999GL900493
59. Russell, C.T., D.E. Huddleston, R.J. Strangeway, X. Blanco-Cano, M.G. Kivelson, K.K. Khurana, L.A. Frank, W. Paterson, D.A. Gurnett, and W.S. Kurth, Mirror mode structures at the Galileo Io flyby: Observations, J. Geophys. Res., 104, 17,471, 1999. (IGPP Publication No. 5343) 1999JA900202
60. Mauk, B.H., Williams, D.J, McEntire, R.W., Khurana, K.K., Roederer J. G., Storm-like dynamics of Jupiter's inner and middle magnetosphere, J. Geophys. Res., *104*, 22,759, 1999. 1999JA00097
61. Kivelson, M.G., K.K. Khurana, C.T. Russell, M. Volwerk, R.J. Walker, and C. Zimmer, Galileo Magnetometer Measurements: A stronger Case for a Subsurface Ocean at Europa, Science, 289, 1340, 2000. (IGPP Pub. No. 5461) [JPL 958694] Sci2891340
62. Zimmer, C., K.K. Khurana, and M.G. Kivelson, Subsurface oceans on Europa and Callisto: Constraints from Galileo magnetometer observations, ICARUS, 147, 329, 2000. (IGPP Pub. No. 5422) [JPL 958694, NAG 5-7959] ICRUS147329
63. Russell, C.T., K.K. Khurana, M.G. Kivelson, and D.E. Huddleston, Substorms at Jupiter: Galileo observations of transient reconnection in the near tail, Adv. Space Res., 26, 1499, 2000. ASR261499
64. Russell, C.T., D.E. Huddleston, K.K. Khurana, and M.G. Kivelson, Waves and Fluctuations in the Jovian Magnetosphere, Adv. Space Res., 26, 1489, 2000. ASR261489
65. Huddleston, D.E., R.J. Strangeway, X. Blanco-Cano, C.T. Russell, M.G. Kivelson, and K.K. Khurana, Io - Jupiter Interaction: Waves Generated by Pickup Ions, Adv. Space Res., 26, 1513, 2000. ASR261513

66. Russell, C.T., M.G. Kivelson, K.K. Khurana, and D.E. Huddleston, Circulation and Dynamics in the Jovian Magnetosphere, Adv. Space Res., 26, 1671, 2000. ASR261671
67. Khurana, K. K., Influence of solar wind on Jupiter's magnetosphere deduced from currents in the equatorial plane JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS 106 (A11): 25999-26016 NOV 1 2001. 2000JA000352
68. Selesnick RS, Cohen CMS, Khurana KK, Energetic ion dynamics in Jupiter's plasma sheet, JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS 106 (A9): 18895-18905 SEP 1 2001. 2000JA000242
69. Volwerk, M., M.G. Kivelson, and K.K. Khurana, Wave activity in Europa's wake: implications for ion pick-up, J. Geophys. Res., 106, 26,033, 2001. (IGPP Pub. No. 5487) 2000JA00347
70. Kivelson, M.G., K.K. Khurana, C.T. Russell, M. Volwerk, S.P. Joy, R.J. Walker, C. Zimmer, and J.A. Linker, Magnetized or unmagnetized: Ambiguity persists following Galileo's encounters with Io in 1999 and 2000, J. Geophys. Res., 106, 26,121, 2001. (IGPP Pub. No. 5492) [[JPL 958694]] 2000JA002510
71. Russell, C.T., P.D. Fieseler, D. Bindshadler, Z.J. Yu, S.P. Joy, K.K. Khurana, and M.G. Kivelson, Large scale changes in the highly energetic charged particles in the region of the Io torus, Adv. Space Res., 28, 1495, 2001. (IGPP Pub. No. 5730) ASR281495
72. Blanco-Cano, X., C.T. Russell, R.J. Strangeway, M.G. Kivelson, and K.K. Khurana, Galileo observations of Ion cyclotron waves in the Io torus, Adv. Space Res., 28, 1469, 2001. ASR281469
73. Russell, C.T., Z.J. Yu, K.K. Khurana, and M.G. Kivelson, Magnetic field changes in the inner magnetosphere of Jupiter, Adv. Space Res., 28, 897, 2001. ASR28897
74. Frank LA, Paterson WR, Khurana KK, Observations of thermal plasmas in Jupiter's magnetotail, JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS 107 (A1): Art. No. 1003 JAN 2002. 2001JA000077
75. Khurana, K.K., M.G. Kivelson, and C.T. Russell, Searching for liquid water in Europa by using surface observatories, Astrobiology Journal, 2, 93, 2002. Astro293202
76. Kivelson, M.G., K.K. Khurana, and M. Volwerk, The permanent and inductive magnetic moments of Ganymede, Icarus 157(2), 507, 2002. (IGPP Pub. No. 5562) [[JPL 958694]] ICRUS1572507
77. Kivelson, M. G., K. K. Khurana, and R. J. Walker, Sheared magnetic field structure in Jupiter's dusk magnetosphere: Implications for return currents, J. Geophys. Res., 107(A7), 10.1029/2001JA000251, 2002. (IGPP Pub. No. 5680) 2001JA000251
78. Joy, S. P., M. G. Kivelson, R. J. Walker, K. K. Khurana, C. T. Russell, and T. Ogino, Probabilistic models of the Jovian magnetopause and bow shock locations, J. Geophys. Res., 107(0), 10.1029/2001JA009146, 2002. (IGPP Pub. No. 5704) [[JPL 958694, NAG5-10282]] 2001JA009146
79. Kivelson, M.G., and K.K. Khurana, Properties of the magnetic field in the Jovian magnetotail, J. Geophys. Res., 107(A8), 10.1029/2001JA000249, 2002. (IGPP Pub. No. 5679 or 6113) [[JPL 958694, NAG5-9546]] 2001JA000249
80. Volwerk, M., M.G. Kivelson, K.K. Khurana, and C. Zimmer, Discovery of water on the Galilean satellites by the Galileo magnetometer, Proceedings of the Second European Workshop on Exo/Astrobiology, Graz, Austria, pp. 565, Sept. 2002. (IGPP Pub. No. 6114) PSEWEA565
81. McPherron, R.L., M.G. Kivelson, K.K. Khurana, O. Amm, J.B. Baker, A. Balogh, H. Reme, M. Connors, F. Creutzberg, I. Dandouras, I. Mann, D. Milling, M.B. Moldwin, G. Rostoker, C.T. Russell, and H. Singer, Cluster Observations of the Postmidnight Plasma Sheet at 18 Re during Substorms, in Proc. of International Conference Substorms-6 (ICS6), pp. 283-290, University of Washington, Seattle, Washington, 2002. (IGPP Pub. No. 5888 or 6089 or 6115) McPics6
82. Slavin, J.A., R.P. Lepping, J. Gjerloev, M.L. Goldstein, D.H. Fairfield, M.H. Acuna, A. Balogh, M. Dunlop, M.G. Kivelson, K. Khurana, A. Fazakerley, C.J. Owen, H. Reme and J.M. Bosqued, Cluster electric current density measurements within a magnetic flux rope in the plasma sheet, Geophys. Res. Lett., 30, 1362, 2003. (IGPP Pub. No. 6117) 2002GL016411
83. Thompson, S.M., M.G. Kivelson, K.K. Khurana, A. Balogh, H. Reme, A. Fazakerley, L. Kistler, Cluster observations of quasi-periodic impulsive signatures in the dayside northern lobe: High latitude flux transfer events?, J. Geophys. Res., 109, A02213, 2004. (IGPP Pub. No. 5803 or 5122) [[NAG 5-12131]] 2003JA010138
84. Schilling, N., K.K. Khurana, and M.G. Kivelson, Limits on an intrinsic dipole moment in Europa, J. Geophys. Res., 109, E05006, 2004. (IGPP Pub. No. 5820) [[JPL 1238965, NAG 5-11859]] 2003JE002166
85. Zhang, T.L., K.K. Khurana, C.T. Russell, M.G. Kivelson, R. Nakamura, and W. Baumjohann, On the venus bow shock compressibility, Adv. Space Res., 33, 1920, 2004. ASR331920
86. Khurana, K. K., M. G. Kivelson, V. M. Vasyliunas, N. Krupp, J. Woch, A. Lagg, B. H. Mauk, W. S. Kurth, Chapter 24 - The configuration of Jupiter's magnetosphere, edited by F. Bagenal, T. Dowling and W. McKinnon, Cambridge Univ. Press, 593, 2004. (IGPP Pub. No. 6119) [[JPL 958694]] CH24
87. Krupp, N., V.M. Vasyliunas, J. Woch, A. Lagg, K.K. Khurana, M.G. Kivelson, B.H. Mauk, E.C. Roelof, D.J.

Williams, S.M. Krimigis, W.S. Kurth, L.A. Frank, W.R. Paterson, Chapter 25, Dynamics of the Jovian magnetosphere, edited by F. Bagenal, T. Dowling and W. McKinnon, Cambridge Univ. Press, 617, 2004. (IGPP Pub. No. 6121) [[JPL 958694]] CH25

Since Last Review

88. Thompson SM, Kivelson MG, Khurana KK, McPherron RL, Weygand JM, Balogh A, Reme H, Kistler LM, Dynamic Harris current sheet thickness from Cluster current density and plasma measurements JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS 110 (A2): Art. No. A02212 FEB 19 2005. 2005JA010714
89. Chust, T., A. Roux, W.S. Kurth, D.A. Gurnett, M.G. Kivelson, and K.K. Khurana, Are Io's Alfven wings filamented? Galileo observations, Planetary and Space Science, 53, 395, 2005. (IGPP Pub. No. 6124) PSS53395
90. Weygand J. M., M. G. Kivelson, K. K. Khurana, H.K. Schwarzl, S.M. Thompson, R. L. McPherron, A. Balogh, L. Kistler, M.L. Goldstein, J. Borovsky, and D.A. Roberts, Plasma sheet turbulence observed by Cluster II, J. Geophys. Res., 110, A01205, doi:10.1029/2004JA010581, 2005. (IGPP Pub. No. 5821) [[NAG 512131]] 2004JA010581.
91. Kronberg EA, Woch J, Krupp N, Lagg A, Khurana KK, Glassmeier KH, Mass release at Jupiter: Substorm-like processes in the Jovian magnetotail JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS 110 (A3): Art. No. A03211 MAR 15 2005. 2004JA010777
92. Dougherty MK, Achilleos N, Andre N, Arridge CS, Balogh A, Bertucci C, Burton ME, Cowley SWH, Erdos G, Giampieri G, Glassmeier KH, Khurana KK, Leisner J, Neubauer FM, Russell CT, Smith EJ, Southwood DJ, Tsurutani BT, Cassini magnetometer observations during Saturn orbit insertion SCIENCE 307 (5713): 1266-1270 FEB 25 2005. Sci12662005
93. Waldrop LS, Fritz TA, Kivelson MG, et al. Jovian plasma sheet morphology: particle and field observations by the Galileo spacecraft/ PLANETARY AND SPACE SCIENCE 53 (6): 681-692 MAY 2005. PSS53681
94. Backes H, Neubauer FM, Dougherty MK, et al. Titan's magnetic field signature during the first Cassini encounter SCIENCE 308 (5724): 992-995 MAY 13 2005. Sci9922005
95. Russell CT, Leisner JS, Khurana KK, et al. Ion cyclotron waves in the Saturnian magnetosphere associated with Cassini's engine exhaust GEOPHYSICAL RESEARCH LETTERS 32 (14): Art. No. L14S01 JUN 1 2005. 2005GL022672
96. Leisner JS, Russell CT, Khurana KK, et al. Warm flux tubes in the E-ring plasma torus: Initial Cassini magnetometer observations GEOPHYSICAL RESEARCH LETTERS 32 (14): Art. No. L14S08 JUN 16 2005. 2005GL022652
97. Andre N, Dougherty MK, Russell CT, et al. Dynamics of the Saturnian inner magnetosphere: First inferences from the Cassini magnetometers about small-scale plasma transport in the magnetosphere GEOPHYSICAL RESEARCH LETTERS 32 (14): Art. No. L14S06 JUN 14 2005. 2005GL022643
98. Russell CT, Kivelson MG, Khurana KK Statistics of depleted flux tubes in the Jovian magnetosphere PLANETARY AND SPACE SCIENCE 53 (9): 937-943 AUG 2005. PSS53937
99. Khurana KK, Schwarzl HK Global structure of Jupiter's magnetospheric current sheet JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS 110 (A7): Art. No. A07227 JUL 23 2005. 2004JA010757
100. Bhattacharya B, Thorne RM, Williams DJ, et al. Diffuse auroral precipitation in the Jovian upper atmosphere and magnetospheric electron flux variability ICARUS 178 (2): 406-416 NOV 15 2005. ICARUS1782005
101. Cooper JF, Khurana KK Jovian magnetospheric environment science ICARUS 178 (2): 295-296 NOV 15 2005. ICURUS178295
102. Kivelson MG, McPherron RL, Thompson S, et al. The response of the near earth magnetotail to substorm activity ADVANCES IN SPACE RESEARCH 36 (10): 1818-1824 Sp. Iss. 2005 2005. ASR361818
103. Saur J, Mauk BH, Mitchell DG, et al. Anti-planetward auroral electron beams at Saturn NATURE 439 (7077): 699-702 FEB 9 2006. Nature04401
104. Dougherty MK, Khurana KK, Neubauer FM, et al. Identification of a dynamic atmosphere at Enceladus with the Cassini magnetometer SCIENCE 311 (5766): 1406-1409 MAR 10 2006. Sci3111406
105. Neubauer FM, Backes H, Dougherty MK, et al. Titan's near magnetotail from magnetic field and electron plasma observations and modeling: Cassini flybys TA, TB, and T3 JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS 111 (A10): Art. No. A10220 OCT 19 2006. 2006JA011676
106. Weygand JM, Kivelson MG, Khurana KK, et al. Non-self-similar scaling of plasma sheet and solar wind probability distribution functions of magnetic field fluctuations JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS 111 (A11): Art. No. A11209 NOV 9 2006. 2006JA011820
107. Arridge CS, Achilleos N, Dougherty MK, et al. Modeling the size and shape of Saturn's magnetopause with variable dynamic pressure JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS 111 (A11): Art. No. A11227 NOV 23 2006. 2005JA011574
108. Joy SP, Kivelson MG, Walker RJ, et al. Mirror mode structures in the Jovian magnetosheath JOURNAL OF

GEOPHYSICAL RESEARCH-SPACE PHYSICS 111 (A12): Art. No. A12212 DEC 16 2006. 2006JA011985

109. Arridge CS, Russell CT, Khurana KK, et al. Mass of Saturn's magnetodisc: Cassini observations GEOPHYSICAL RESEARCH LETTERS 34 (9): Art. No. L09108 MAY 12 2007. 2006GL028921
110. Volwerk M, Khurana K, Kivelson M Europa's Alfven wing: shrinkage and displacement influenced by an induced magnetic field ANNALES GEOPHYSICAE 25 (4): 905-914 2007. 2007AG25905
111. Leisner JS, Russell CT, Khurana KK, et al. Measuring the stress state of the Saturnian magnetosphere GEOPHYSICAL RESEARCH LETTERS 34 (12): Art. No. L12103 JUN 19 2007. 2007GL029315
112. Khurana, KK., Dougherty MK, Russell CT and Leisner JS, Mass loading of Saturn's magnetosphere near Enceladus, J. Geophys. Res., 112, A08203, doi:10.1029/2006JA012110. 2006JA012110
113. Khurana KK, Pappalardo RT, Murphy, N, and Denk T., The origin of Ganymede's polar caps, Icarus (2007), doi: 10.1016/j.icarus.2007.04.022. ICURUS2007
114. Paranicas, C, Mauk BH, Khurana KK, Jun, I, Garrett, H., Krupp N. and Roussos, E., (2007), Europa's near surface radiation environment, Geophys. Res. Lett., 34, L15103, doi:10.1029/2007GL030834. 2007GL030834
115. Khurana, KK, Russell, CT, Dougherty, MK, Magnetic portraits of Tethys and Rhea, paper accepted for publication in Icarus, August, 2007. IGPP publication # 6353, (10): 1016 J.ICARUS200708005 J.ICARUS200708005
116. Jia, X, Walker, RJ, Kivelson, MG, Khurana, KK, Linker JA, Three dimensional MHD simulations of Ganymede's magnetosphere, J. Geophys. Res., 113, A06212, doi: 10.1029/2007JAO12748, 2008. 2007JAO12748
117. Arridge CS, Khurana, KK, Russell, CT et al. Warping of Saturn's magnetospheric and magnetotail current sheets, J. Geophys. Res., 113, A08217, doi:10.1029/2007JA012963, 2008 2007JA012963
118. Russell, CT, Khurana, KK, Arridge CS, et al. The magnetospheres of Jupiter and Saturn and their lessons for the Earth, ADVANCES IN SPACE RESEARCH, 41, vol. 8, 1310-1318, 2008 ASR411310
119. Khurana, KK, Mitchell, DG, Arridge, CS et al. Sources of rotational signals in Saturn's magnetosphere, JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS 114, A02211, (10):1029/2008JA013312, 2009 2008JA013312

Research Papers in Press

Research Papers under review

Research Papers under Preparation

1. Khurana, K.K., J. Warnecke, M. G. Kivelson, C. T. Russell, W. S. Kurth, D. A. Gurnett and D. J. Williams, Ganymede's distant plasma wake, in preparation for JGR, 2007.
2. Khurana, K.K., and Schwarzl, H. K., Radial and local time variations in the thickness of Jovian current sheet, to be sumitted to J. Geophys. Res., 2007.
3. Khurana, KK, Dougherty MK, Burger M, Russell, CT and Schubert G., Dione's faint breath, manuscript to be submitted to Nature, 2007.

Published Abstracts

1. Khurana K. K. Propagation of magneto-hydrodynamic waves in the Earth's core. Paper presented at the Seventh U. K. Geophysical Assembly at Leicester 11--14th April 1983.
2. Khurana, K.K., and M.G. Kivelson. A Reanalysis of Voyager 2 magnetic data in the 'Ganymede Wake' Region. EOS 66, 1049 (1985).
3. Khurana, K.K., M.G. Kivelson, R.J. Walker, and T.P. Armstrong. A reanalysis of Voyager 2 field and particle data near Ganymede's orbit. Second Neil Brice Memorial Symposium on "Magnetospheres of the Outer Planets," September 1-5 1986, Book of Abstracts, 35 (1986).
4. Khurana, K.K., M.G. Kivelson, R.J. Walker, and T.P. Armstrong. A new interpretation of plasma dropouts in Voyager 2 data near Ganymede's orbit. EOS 67, 1171 (1986).
5. Khurana, K.K., and M.G. Kivelson. ULF waves in Jupiter's magnetosphere. EOS 68, 16, 390 (1987).
6. Khurana, K.K., and M.G. Kivelson. A case-study of some ULF waves in the Jovian magnetosphere. Proceedings of 19th Generaly Assembly IUGG, August 9-22, 1987, Abstracts 2, 603 (1987).
7. Khurana, K.K., M.G. Kivelson. An improved model of Jovian Plasma sheet structure constrained by tail lobe encounters. 19th Annual Meeting of DPS, Pasadena, November 10-13, 1987. Bulletin of the Am. Ast. Soc. 19, 876 (1987).
8. Khurana, K.K., M.G. Kivelson. A test of the magnetic-anomaly model from predictions of Jovian magnetotail structure. EOS 68, 44, 1429 (1987).
9. Khurana, K.K., and M.G. Kivelson. Bounds on the LECP particle pressures in the middle jovian magnetosphere from a ULF wave study. EOS 69, 433 (1988).

10. Khurana, K.K., and M.G. Kivelson. The structure of the Jovian plasma sheet in the hinged-magnetodisc and magnetic anomaly models. Proceedings of 27th COSPAR Meeting, July 18-29, 1988, Finland (1988).
11. Khurana, K.K., and M.G. Kivelson. MHD constraints on Jovian plasma sheet thickness. EOS 69, 1399 (1988).
12. Khurana, K.K., and M.G. Kivelson. The relationship between the warping of the Jovian plasma sheet and the field line sweep-back. EOS 70,15, 451 (1989).
13. Khurana, K.K., and M.G. Kivelson. Angular momentum transport and azimuthal magnetic field in the jovian magnetosphere. Proceedings of the Sixth IAGA Scientific Assembly. Session 3.8 (1989).
14. Khurana, K.K., and M.G. Kivelson. Calculation of angular velocity of plasma in Jupiter's magnetosphere from azimuthal stress balance. Bulletin of the American Astronomical Society 21, 5, 942 (1989).
15. Khurana, K.K., and M.G. Kivelson. Azimuthal stress balance and corotation of plasma in the jovian magnetosphere. EOS 70, 43, 1283 (1989).
16. Khurana, K.K., S.H. Chen, M.G. Kivelson. ULF waves in the magnetotails of Earth and Jupiter. Proceedings of 2nd COSPAR Conference, 29 (1990).
17. Khurana, K.K. and M.G. Kivelson. Improved estimates of high energy particle number density and pressure in the Jovian plasma sheet from a comparison between particle and magnetic data. In Book of Abstracts of Fred Scarf Symposium, CM-5 (1990).
18. Khurana, K.K. A generalized hinged-magnetodisc model of Jovian plasma sheet. EOS 70, 1543 (1990).
19. Kivelson, M.G., C.F. Kennel, R.L. McPherron, C.T. Russell, D.J. Southwood, R.J. Walker, and K.K. Khurana. Magnetic field studies of the terrestrial magnetosphere from the Galileo flyby: First results. EOS 72 (1991).
20. Kivelson, M.G. C.F. Kennel, R.L. McPherron, C.T. Russell, D.J. Southwood, R.J. Walker, R.L. Strangeway, and K.K. Khurana. Galileo at Venus: The interplanetary magnetic field and properties of the bow shock. EOS 72, 187 (1991).
21. Khurana, K.K., M.G. Kivelson. IMF-dependent models of planetary bow-shocks. EOS 72, 390 (1991).
22. Khurana, K.K., and M.G. Kivelson. Angular velocity of plasma computed from magnetic data: A comparison of results from Voyager 1 and Voyager 2. Abstract book, Magnetospheres of the outer planets 9, P9, (1992).
23. Khurana, K.K., Magnetotail dynamics and configuration in the presence of IMF By. EOS 73, 462 (1992).
24. Kivelson, M.G., R.L. McPherron, V. Angelopoulos, K.K. Khurana, C.M. Hammond, and A.J. Lazarus. Magnetic signatures in the Galileo data from earth flyby: Can solar wind interpretations and auroral substorm processes explain the dynamics of the magnetotail. Book of Abstracts, COSPAR, Washington, D.C., 347 (1992).
25. Khurana, K.K., M.G. Kivelson, R.J. Walker, T. Ogino. The effect of an IMF By component on the magnetotail. EOS 74, 273 (1993).
26. K.K., and M.G. Kivelson. A study of flux ropes in the Earth's magnetotail encountered by Galileo during the Earth-1 flyby. EOS 74, 544 (1993).
27. Kivelson, M.G., K.K. Khurana, C.T. Russell, D.J. Southwood, R.J. Walker, and Z. Wang. Ida Flyby: First results from the Galileo magnetometer. EOS 74, 384 (1993).
28. Kivelson, M.G., L.F. Bargatze, K.K. Khurana, R.J. Walker, P.J. Coleman, D.J. Southwood. Magnetic signatures near Galileo's closest approach to Gaspra. Annales Geophysicae V11, Suppl. 3, c474 (1993).
29. Kivelson, M.G., L.F. Bargatze, K.K. Khurana, D.J. Southwood, R.J. Walker, P.J. Coleman, and R.P. Lepping. Recent results from the Galileo magnetometer investigations. EOS 74, 199 (1993).
30. Khurana, K.K., R.J. Walker, M.G. Kivelson, T. Ogino. Magnetospheric structure in the presence of an IMF By component. IAGA Bulletin No. 55, Part B, 281 (1993).
31. Kivelson, M.G., L.F. Bargatze, D.J. Southwood, K.K. Khurana, and R.J. Walker. Magnetic signatures near Galileo's closest approach to Gaspra: A putative asteroid magnetosphere. IAGA Bulletin No. 55, Part B, 298 (1993).
32. Wang, Z., M.G. Kivelson, K.K. Khurana, D.J. Southwood, and R.J. Walker. Kinetic effects on the whistler wake waves. EOS 74, 385 (1993).
33. Xu, Y., K.K. Khurana, M.G. Kivelson and C. T. Russell. A comparison of the variable cross-section bow shock model of Venus with the PVO observations. EOS 74, 376 (1993).
34. Chen, X., M.G. Kivelson, and K.K. Khurana. A study of stress balance in some flux ropes encountered in the magnetotail. EOS 74, 522 (1993).
35. Khurana, K.K., M.G. Kivelson, Z. Wang, and C. T. Russell. The effect of the solar wind dynamic pressure and ion pick-up on the Venusian bow shock. EOS 75, 272 (1994).
36. Khurana, K. K. and M. G. Kivelson, Galileo: Can it resolve the controversy between magnetic anomaly and magnetodisc models of the Jovian magnetospheric structure, Book of Abstracts, Page MFP-16, Magnetospheres of the outer planets, University of Graz, Austria, 1994.
37. Kivelson, M. G., S.-H. Chen and K. K. Khurana, Surface waves on the magnetopause of Jupiter near the dawnside flanks: Expectations from terrestrial study, Book of Abstracts, Page MFP-6, Magnetospheres of the outer planets, University of Graz, Austria, 1994.
38. Khurana, K. K., M. G. Kivelson, L. A. Frank and W. R. Paterson, Unusual properties of flux ropes

encountered by Galileo during the Earth-1 flyby, Eos, 75, 558, 1994.
39. Chen, X., M. G. Kivelson, R. J. Walker, and K. K. Khurana, A study of flux ropes in the magnetotail, Eos, 75, 560, 1994.
40. Khurana, K. K., Kivelson, M. G., and E. L. Kepko, Measuring magnetic field gradients from four point vector measurements in space, Book of Abstracts, Page 30, Chapman conference on "Measurement techniques for space plasmas", Santa Fe, New Mexico, 1995.
41. Khurana, K. K., and M. G. Kivelson, Models of flux ropes embedded in a Harris neutral sheet: Application to Galileo observations from the Earth-1 flyby, Eos, 76, S263, 1995.
42. Kivelson, M. G, and Khurana K. K., Models of flux ropes embedded in a Harris sheet: Mathematical formulation, Eos, 76, S263, 1995.
43. Elphic, R. C., A. Balogh, M. W. Dunlop, M. G. Kivelson, K. K. Khurana, A technique for intercalibrating magnetic field observations from two or more closely spaced satellites, Eos, 76, S256, 1995.
44. Wang, Z., M. G. Kivelson, K. K. Khurana, R. J. Walker, Interaction of small bodies with flowing plasmas in the solar wind and at Jupiter, Book of Abstracts, Page. A78, IUGG meeting, Boulder Colorado, 1995.
45. M. G. Kivelson, K. K. Khurana, A self consistent force free model of flux ropes embedded in a neutral sheet: 1. Theory, Book of Abstracts, Page. A122, IUGG meeting, Boulder Colorado, 1995.
46. Khurana K. K., M. G. Kivelson, A self consistent force free model of flux ropes embedded in a neutral sheet: 2. Application to flux ropes observed in the magnetotail, Book of Abstracts, Page. A122, IUGG meeting, Boulder Colorado, 1995.
47. Kivelson, M. G., R. J. Walker, K. K. Khurana, Flux ropes in the magnetotail: Implications for conjugate studies, Book of Abstracts, Page. A154, IUGG meeting, Boulder Colorado, 1995.
48. Khurana, K. K., E. L. Kepko, M. G. Kivelson, Use of empirical models in devising techniques to calculate magnetic gradients accurately from four point measurements, Book of Abstracts, Page. B191, IUGG meeting, Boulder Colorado, 1995.
49. Kivelson, M.G, R. J. Walker, K. K. Khurana, Flux ropes, interhemispheric conjugacy, and current closure, Eos, 76, F485, 1995.
50. Khurana, K. K., A new magnetic field model for the Jovian magnetosphere, Eos, 76, F503, 1995.
51. Kepko, E. L., K. K. Khurana, M. G. Kivelson, Use of four spacecraft in determining the characteristics of boundaries and surfaces, Eos, 76, F512, 1995.
52. Kivelson, M.G., K.K. Khurana, R.J. Walker, and D.J. Southwood, Galileo at Jupiter: Expectations and early results from the magnetometer, Annales Geophysicae, 14, C813, May, 1996.
53. Khurana, K.K., and M.G. Kivelson, An Euler potential based field model of Jupiter's magnetosphere, Annales Geophysicae, 14, C813, May, 1996.
54. Kivelson, M.G., K.K. Khurana, R.J. Walker, J. A. Linker, C. T. Russell, D. J. Southwood, D. Barbosa, and C. Polanskey, A magnetic signature at Io: Preliminary results, EOS, Trans. AGU, 1996.
55. Linker, J. A., M.G. Kivelson, K.K. Khurana, and R.J. Walker, Deducing the nature of Io's interaction with the plasmas torus, EOS, Trans. AGU, 1996.
56. Huddleston, D. E., C. T. Russell, M.G. Kivelson, K.K. Khurana, and L. Bennett, Location of the Jovian bow shock and magnetopause during the Galileo inbound pass, EOS, Trans. AGU, 1996.
57. Kivelson, M.G., C.T. Russell, K.K. Khurana, R.J. Walker, and J. A. Linker, Initial Galileo magnetometer results, Western Pacific Geophysics Meeting, 1996.
58. Kivelson, M.G., K.K. Khurana, C.T. Russell, R.J. Walker, P.J. Coleman, F.V. Coroniti, J. Green, S. Joy, R.L. McPherron, C. Polanskey, D.J. Southwood, L. Bennett, and D. Huddleston, Galileo at Jupiter: Magnetometer results, B0.2-0017, pp. 54, COSPAR, 1996.
59. Kivelson, M.G., D.J. Southwood, J. Linker, K.K. Khurana, C.T. Russell, R.J. Walker, P.J. Coleman, F.V. Coroniti, and R.L. McPherron, Galileo's flyby of Io: Speculative interpretations of the magnetic signature of the wake, C3.2-0034, pp. 146, COSPAR, 1996.
60. Khurana, K.K., and M.G. Kivelson, A comparison of a global model of Jupiter's magnetospheric field with observations from Galileo, C3.2-0041, pp. 147, COSPAR, 1996.
61. Khurana, K.K., M.G. Kivelson, D.J. Southwood, R.J. Walker, J. Linker, C.T. Russell, P.J. Coleman, F.V. Coroniti, and R.L. McPherron, Observations of a large magnetic cavity in Io's wake, C3.2-0035, pp. 146, COSPAR, 1996.
62. Kepko, E.L., K.K. Khurana, and M.G. Kivelson, Use of four spacecraft in determining the characteristics of magnetospheric boundaries and phenomena, D0.1-0106, pp. 184, COSPAR, 1996.
63. Linker, J.A., K. K. Khurana, M.G. Kivelson, and R.J. Walker, Io's interaction with the plasma torus: Comparisons of MHD Simulations with Galileo observations, C3.2-0036, pp. 146, COSPAR, 1996.
64. Huddleston, D.E., C.T. Russell, M.G. Kivelson, K.K. Khurana, and L. Bennett, Location of the Jovian magnetopause and bow shock: Galileo inbound pass, B0.2-0038, pp. 58, COSPAR, 1996.
65. Khurana, K.K., M.G. Kivelson, C.T. Russell, R.J. Walker, J. Warnecke, S. Joy, J. A. Linker, and D.J. Southwood, Recent results from the Galileo magnetometer, Bull. Am. Phys. Soc., 28, 1055, 1996.
66. Russell, C.T., K.K. Khurana, M.G. Kivelson, R.J. Walker, and D. E. Huddleston, Global reconfiguration

of the Jovian current sheet, Bull. Am. Phys. Soc., 28, 1137, 1996.
67. Warnecke, J., R.J. Walker, C.T. Russell, M.G. Kivelson, and K.K. Khurana, Ion cyclotron waves observed at Galileo's Io encounter: Implications for neutral distribution, Bull. Am. Phys. Soc., 28, 1138, 1996..
68. Russell, C.T., M.G. Kivelson, and K.K. Khurana, Magnetic fields of the Galilean Satellites, Lunar Planetary Science Conference, March 1997.
69. Russell, C.T., D. E. Huddleston, K.K. Khurana, and M.G. Kivelson, Galileo observations of ULF waves in and near the Jovian current sheet, Magnetospheres of the Outer Planets Meeting, Boulder, CO, 1997.
70. Russell, C.T., D. E. Huddleston, K.K. Khurana, and M.G. Kivelson, A substorm analog in the Jovian magnetosphere, Magnetospheres of the Outer Planets Meeting, Boulder, CO, 1997.
71. Huddleston, D. E., C. T. Russell, M.G. Kivelson, K.K. Khurana, and L. Bennett, Location and shape of the Jovian magnetopause and bow shock, Magnetospheres of the Outer Planets Meeting, Boulder, CO, 1997.
72. Linker, J. A., K.K. Khurana, M.G. Kivelson, and R.J. Walker, MHD simulations of the Ganymede magnetosphere, Magnetospheres of the Outer Planets Meeting, Boulder, CO, 1997.
73. Warnecke, J., M.G. Kivelson, and K.K. Khurana, Plasma flow and magnetic reconnection near Ganymede, Magnetospheres of the Outer Planets Meeting, Boulder, CO, 1997.
74. Khurana, K.K., M.G. Kivelson, C.T. Russell, R.J. Walker, and D.J. Southwood, Galileo at Callisto and Europa: Magnetometer results, Magnetospheres of the Outer Planets Meeting, Boulder, CO, 1997.
75. Warnecke, J., M.G. Kivelson, and K.K. Khurana, Ganymede's polar cap, Magnetospheres of the Outer Planets Meeting, Boulder, CO, 1997.
76. Linker, J.A., K.K. Khurana, M.G. Kivelson, and R.J. Walker, MHD simulations of Io's interaction with the plasma torus, Magnetospheres of the Outer Planets Meeting, Boulder, CO, 1997.
77. Khurana, K.K., M.G. Kivelson, and C.T. Russell, Does Io have an internal magnetic field?, Magnetospheres of the Outer Planets Meeting, Boulder, CO, 1997.
78. Kivelson, M.G., K.K. Khurana, C.T. Russell, R.J. Walker, and J. Warnecke, Magnetic signatures of Io, Europa, Ganymede, and Callisto, EOS, Trans. AGU, S201, 1997.
79. Russell, C.T., D.E. Huddleston, M.G. Kivelson, and K.K. Khurana, Considerations for the interpretations of the magnetic signature of the Galilean satellites, EOS, Trans. AGU, S202, 1997.
80. Kivelson, M.G., K.K. Khurana, C.T. Russell, D.J. Southwood, and R.J. Walker, Global measurements of Jupiter's magnetic field by Galileo, EOS, Trans. AGU, S292, 1997.
81. Linker, J.A., K.K. Khurana, M.G. Kivelson, and R.J. Walker, MHD simulations of plasma flow past Ganymede, EOS, Trans. AGU, S292, 1997.
82. Warnecke, J., M.G. Kivelson, and K.K. Khurana, Reconnected magnetic field lines above Ganymede's polar cap, EOS, Trans. AGU, S292, 1997.
83. Perraut, S., A. Roux, P. Louarn, D. Gurnett, A. Kurth, K.K. Khurana, and M.G. Kivelson, Mode conversion at the Jovian plasma sheet boundary, EOS, Trans. AGU, S299, 1997.
84. Huddleston, D. E., C. T. Russell, M.G. Kivelson, K.K. Khurana, and R.J. Strangeway, Mirror mode waves at Io, EOS, Trans. AGU, S299, 1997.
85. Khurana, K.K., M.G. Kivelson, and C.T. Russell, Interaction of Io with its torus, EOS, Trans. AGU, S301, 1997.
86. Kivelson, M.G., K.K. Khurana, C.T. Russell, J. Warnecke, and D. Huddleston, ULF waves and diagnostics of planetary magnetospheric processes, IAGA 97 Abstract Book, 322, 1997.
87. Russell, C.T., D.E. Huddleston, K.K. Khurana, and M.G. Kivelson, Galileo observations of ULF waves in and near the jovian current sheet, IAGA 97 Abstract Book, 448, 1997.
88. Russell, C.T., D.E. Huddleston, K.K. Khurana, and M.G. Kivelson, A cyclic model of jovian magnetospheric dynamics, IAGA 97 Abstract Book, 448, 1997.
89. Perraut, S., A. Roux, P. Louarn, D. Gurnett, A. Kurth, K. Khurana, and M.G. Kivelson, Mode conversion at the jovian plasma sheet boundary, IAGA 97 Abstract Book, 449, 1997.
90. Huddleston, D. E., C. T. Russell, M.G. Kivelson, K.K. Khurana, and R.J. Strangeway, Galileo observations of mirror mode waves at Io, IAGA 97 Abstract Book, 450, 1997.
91. Khurana, K.K., M.G. Kivelson, C.T. Russell, and R.J. Walker, Galileo's flybys of Europa and Callisto, IAGA 97 Abstract Book, 450, 1997.
92. Linker, J. A., K.K. Khurana, M.G. Kivelson, and R. J. Walker, MHD simulations of plasma flow past the Galilean satellites, IAGA 97 Abstract Book, 451, 1997.
93. Roux, A., T. Chust, S. Perraut, P. Louarn, D.A. Gurnett, W.S. Kurth, M.G. Kivelson, K.K. Khurana, D. MacEntire, B.H. Mauk, and D. Williams, Interaction between the corotating Jovian plasma and the moons; results from Galileo, Program-Abstracts, The Jovian System after Galileo The Saturnian System before Cassini-Huygens, p. 4, Nantes, France, 1998.
94. Kivelson, M.G., K.K. Khurana, C.T. Russell, and R.J. Walker, Jupiter's magnetosphere: Recent results from the Galileo magnetometer, Program-Abstracts, The

Jovian System after Galileo The Saturnian System before Cassini-Huygens, p. 89, Nantes, France, 1998.
95. Walker, R.J., T. Ogino, K.K. Khurana, and M.G. Kivelson, Simulation studies of Jupiter's dynamic dayside magnetosphere, EOS, Trans. AGU, 79, S199, 1998.
96. Russell, C.T., D.E. Huddleston, K.K. Khurana, and M.G. Kivelson, The fluctuating magnetic field in the middle Jovian magnetosphere: An initial assessment, EOS, Trans. AGU, 79, S199, 1998.
97. Zimmer, C.A., K. Ferriere, M.G. Kivelson, K.K. Khurana, M. Blanc, and F.M. Neubauer, Magnetospheric interchange instability revisited, EOS, Trans. AGU, 79, S199, 1998.
98. Kivelson, M.G., K.K. Khurana, S. Joy, C.T. Russell, R.J. Walker, M. Volwerk, and D.J. Stevenson, Probing the interiors and plasma environments of Europa and Callisto with the Galileo Magnetometer, EOS, Trans. AGU, 79, S199, 1998.
99. Huddleston, D.E., C.T. Russell, D.A. Gurnett, W.S. Kurth, J.A. Ansher, K.K. Khurana, and M.G. Kivelson, Stress balance and mass density in the inner Jovian current sheet, EOS, Trans. AGU, 79, S319, 1998.
100. Kepko, L., M.G. Kivelson, K.K. Khurana, S. Kokubun, and T. Makai, Characteristics and evolution of mid-tail flux ropes, EOS, Trans. AGU, 79, S322, 1998.
101. Volwerk, M., M.G. Kivelson, K.K. Khurana, and R.L. McPherron, Probing Ganymede's environment with magnetometer data, EOS, Trans. AGU, 79, S324, 1998.
102. Khurana, K.K., C.A. Zimmer, M.G. Kivelson, C.T. Russell, N. Krupp, J. Woch, P. Louarn, W.S. Kurth, and D.A. Gurnett, Evidence of quasi-periodic magnetic reconfiguration of Jupiters magnetosphere, EOS, Trans. AGU, 79, S325, 1998.
103. Kivelson, M.G., K.K. Khurana, C.T. Russell, and R.J. Walker, Ion pickup, Alfven wings, induced magnetic fields, intrinsic magnetic fields at the Galilean moons of Jupiter, B05-0013, pp. 89, COSPAR, Japan, 1998. (I)
104. Volwerk, M., M.G. Kivelson, K.K. Khurana, and R.L. McPherron, Probing Ganymede's magnetosphere using field line resonances, B05-0016, pp. 89, COSPAR, Japan, 1998.
105. Krupp, N., J. Woch, A. Lagg, S. Livi, B. Wilken, D.J. Williams, K.K. Khurana, R. Walker, and M.G. Kivelson, Energetic particle dynamics of the Jovian magnetosphere: Galileo-EPD results, B05-0026, pp. 91, COSPAR, Japan, 1998.
106. Russell, C.T., M.G. Kivelson, K.K. Khurana, and D.E. Huddleston, Circulation and Dynamics in the Jovian Magnetosphere, B05-0028, pp. 91, COSPAR, Japan, 1998.
107. Walker, R.J., T. Ogino, K.K. Khurana, M.G. Kivelson, N. Krupp, J. Woch, B. Wilken, and D.J. Williams, The configuration of the Jovian magnetotail: A comparison between global magnetohydrodynamic simulations and Galileo observations, B05-0029, pp. 91, COSPAR, Japan, 1998.
108. Kivelson, M.G., S. Joy, K.K. Khurana, C.T. Russell, and R.J. Walker, Galileo at Gaspra, Ida, and the Galilean moons of Jupiter: Lessons for the study of asteroids and comets, B05-0024, pp. 97, COSPAR, Japan, 1998.
109. Khurana, K.K., and M.G. Kivelson, The currents in Jupiter's magnetosphere: A new look from Galileo,C3.2/D0.9-0010, pp. 168, COSPAR, Japan, 1998.
110. Russell, C.T., D.E. Huddleston, K.K. Khurana, and M.G. Kivelson, Waves and fluctuations in the Jovian magnetosphere, C3.2/D0.9-0011, pp. 168, COSPAR, Japan, 1998.
111. Russell, C.T., K.K. Khurana, M.G. Kivelson, and D.E. Huddleston, Substorms at Jupiter, C3.2/D0.9-0012, pp. 169, COSPAR, Japan, 1998.
112. Walker, R.J., T. Ogino, K.K. Khurana, and M.G. Kivelson, Jupiter's dynamic dayside magnetosphere: A comparison between global magnetohydrodynamic simulations and observations, C3.2/D0.9-0013, pp. 169, COSPAR, Japan, 1998.
113. Kivelson, M.G., K.K. Khurana, J.A. Linker, C.T. Russell, M. Volwerk, R.J. Walker, and L. Bennett, Ganymede's magnetosphere, C3.2/D0.9-0018, pp. 170, COSPAR, Japan, 1998.
114. Huddleston, D.E., R.J. Strangeway, X. Blanco-Cano, C.T. Russell, M.G. Kivelson, and K.K. Khurana, The mirror mode at Io: Dispersion analysis, C3.2/D0.9-0020, pp. 170, COSPAR, Japan, 1998.
115. Khurana, K.K., and M.G. Kivelson, Structure of Jupiter's magnetodisc: Modified models consistent with Galileo observations from the Prime and GEM missions, EOS, Trans. AGU, 79, F548, 1998.
116. Russell, C.T., D.E. Huddleston, F. Konstantindis, M.G. Kivelson, and K.K. Khurana, Sources and losses of the Jovian plasma, EOS, Trans. AGU, 79, F548, 1998.
117. Kurth, W.S., D.A. Gurnett, A. Roux, P. Louarn, M.G. Kivelson, C. Zimmer, K.K. Khurana, C.T. Russell, D.J. Williams, R.W. McEntire, and C.J. Alexander, Direction-finding measurements of Jovian hectometric radiation sources using occultations by the Galilean satellites, EOS, Trans. AGU, 79, F548, 1998.
118. Walker, R.J., G. Ballester, K.K. Khurana, M.G. Kivelson, T. Ogino, and M. Sharlow, Studying Jovian aurora by using a global magnetohydrodynamic simulation of the interaction of the solar wind with the magnetosphere, EOS, Trans. AGU, 79, F549, 1998.
119. Konstantindis, F., C.T. Russell, D.E. Huddleston, K.K. Khurana, and M.G. Kivelson, Magnetic evidence for an extended Europa wake, EOS, Trans. AGU, 79, F551, 1998.

120. Volwerk, M., M.G. Kivelson, K.K. Khurana, D.E. Huddleston, R.J. Strangeway, Ion pickup and asymmetries in Europa's wake, EOS, Trans. AGU, 79, F551, 1998.
121. Zimmer, C., K.K. Khurana, and M.G. Kivelson, Magnetic sounding of the interiors of Europa and Callisto by Galileo, EOS, Trans. AGU, 79, F552, 1998.
122. Huddleston, D.E., C.T. Russell, J.A. Ansher, D.A. Gurnett, W.S. Kurth, K.K. Khurana, M.G. Kivelson, and D.J. Williams, Jovian current sheet stress balance and mass density, EOS, Trans. AGU, 79, F753, 1998.
123. Green, J.C., M.G. Kivelson, R.J. Walker, K.K. Khurana, H.E. Spence, and J.B. Blake, The polar cap boundary for northward IMF, EOS, Trans. AGU, 79, F775, 1998.
124. Volwerk, M., M.G. Kivelson, and K.K. Khurana, Ion Pickup and Wave Activity Near Europa, EOS, Trans. AGU, 80, S200, 1999.
125. Zimmer, C., K.K. Khurana, and M.G. Kivelson, Feasibility of Sounding Europa's Interior Using an Orbiting Magnetometer, EOS, Trans. AGU, 80, S205, 1999.
126. Kivelson, M.G., K.K. Khurana, and R.J. Walker, Plasma-Field Interactions at Europa and Callisto: Wakes and Alfven Wings, EOS, Trans. AGU, 80, S310, 1999.
127. Green, J.C., M.G. Kivelson, R.J. Walker, K.K. Khurana, H.E. Spence, and J.B. Blake, The Polar Cap Boundary During Northward IMF, IUGG XXII General Assembly, B.347, 1999.
128. Russell, C.T., K.K. Khurana, and M.G. Kivelson, ULF Waves in the Jovian Magnetosphere, IUGG XXII General Assembly, B.350, 1999.
129. Russell, C.T., K.K. Khurana, D.E. Huddleston, J.A. Ansher, D.A. Gurnett, W.S. Kurth, and D.J. Williams, Jovian Current Sheet Stress Balance and Mass Density, IUGG XXII General Assembly, B.377, 1999.
130. Woch, J., N. Krupp, S. Livi, B. Wilken, K.K. Khurana, M.G. Kivelson, . Roux, S. Perraut, P. Loaurn, A. Lagg, and D.J. Williams, Plasma Sheet Dynamics in the Jovian Magnetotail: Evidence for Substorm-Like Processes, IUGG XXII General Assembly, B.377, 1999.
131. Volwerk, M., M.G. Kivelson, and K.K. Khurana, Ion Pickup and Asymmetries in Europa's Wake, IUGG XXII General Assembly, B.378, 1999.
132. Russell, C.T., R.J. Strangeway, M.G. Kivelson, K.K. Khurana, D.E. Huddleston, X. Blanco-Cano, L.A. Frank, W. Paterson, D.A. Gurnett, and W.S. Kurth, Mirror Mode Structures at the Galileo Flyby, IUGG XXII General Assembly, B.379, 1999.
133. Zimmer, C., K.K. Khurana, and M.G. Kivelson, Magnetic Sounding of the Conductivity Structure of Galilean Moons Using Multiple Frequencies of Jupiter's Field, IUGG XXII General Assembly, B.379, 1999.
134. Blanco-Cano, X., C.T. Russell, D.E. Huddleston, R.J. Strangeway, M.G. Kivelson, and K.K. Khurana, Oblique Ion Cyclotron Waves in the Near-Io Torus, IUGG XXII General Assembly, B.379, 1999.
135. Zimmer, C., K.K. Khurana, and M.G. Kivelson, P. Louarn, and N. Krupp, Quasiperiodic Dynamics of the Jovian Magnetotail: The Magnetometer Observations, Magnetospheres of the Outer Planets, Paris, France, p.13, 1999.
136. Volwerk, M., M.G. Kivelson, and K.K. Khurana, Wave Activity in Europa's Wake, Magnetospheres of the Outer Planets, Paris, France, p.114, 1999.
137. Paranicas. C., A.F. Cheng, D.J. Williams, K.K. Khurana, M.G. Kivelson, N. Krupp, and A. Lagg, Ion Precipitation Maps of Europa, Magnetospheres of the Outer Planets, Paris, France, p.115, 1999.
138. Khurana, K.K., and M.G. Kivelson, The Interaction of Europa and Callisto with the Jovian Plasma, Magnetospheres of the Outer Planets, Paris, France, p.116, 1999.
139. Linker, J.A., M.A. McGrath, M.G. Kivelson, R. J. Walker, and K.K. Khurana, "MHD modeling of Io's Interaction with the Plasma Torus: Prediction for the Upcoming Galileo Flybys," (Abstract) BAAS, 31, 1194, presented at the DPS conference in Padua, Italy, 1999.
140. Russell, C.T., M.G. Kivelson, and K.K. Khurana, The Interchange Instability in the Io Torus: Empty Flux Tubes, EOS, Trans. AGU, 80, F621, 1999.
141. Yu, Z.J., C.T. Russell, S.P. Joy, K.K. Khurana, M.G. Kivelson, P.D. Fieseler, and D.L. Bindschadler, The Time Vaiability of the Io Torus, EOS, Trans. AGU, 80, F621, 1999.
142. Volwerk, M., M.G. Kivelson, and K.K. Khurana, Europa's Alfven Wing: Skewness and field Aligned Currents, EOS, Trans. AGU, 80, F875, 1999.
143. Khurana, K.K., and M.G. Kivelson, Inner Jovian Magnetosphere Mass Loading Near Europa, EOS, Trans. AGU, 80, F875, 1999.
144. Zimmer, C., P. Lauarn, M.G. Kivelson, K.K. Khurana, W.S. Kurth, and D.A. Gurnett, Variability of Density and Field Stresses in the Jovian Magnetotail: Implications for Plasma Transport, EOS, Trans. AGU, 80, F877, 1999.
145. Kivelson, M.G., K.K. Khurana, J.A. Linker, R.J. Walker, C.T. Russell, M. Volwerk, C. Zimmer, Io's Magnetic Field and Plasma Interaction, EOS, Trans. AGU, 81, S291, 2000.
146. Russell, C.T., Z.J. Yu, M.G. Kivelson, and K.K. Khurana, The Dipole Magnetic Moment of Jupiter, EOS, Trans. AGU, 81, S301, 2000.
147. Khurana, K.K., M. Volwerk, and M.G. Kivelson, Electrodynamic Interaction of Europa and Callisto with Jupiter's Magnetosphere, EOS, Trans. AGU, 81, S380, 2000.

148. Volwerk, M., M.G. Kivelson, and K.K. Khurana, Alfven Wings and Induced Magnetic Fields near Europa, EOS, Trans. AGU, 81, S380, 2000.
149. Joy, S.P., M.G. Kivelson, R.J. Walker, K.K. Khurana, and C.T. Russell, First Observations From the Dusk Side of Jupiter Near the Equator: New Constraints for Magnetopause and Bowshock Locations, EOS, Trans. AGU, 81, S381, 2000.
150. Kivelson, M.G., K.K. Khurana, C.T. Russell, R.J. Walker, and J.A. Linker, Io's Magnetic Signature: Measurements and Interpretations, COSPAR, pp. 68, Poland, 2000.
151. Russell, C.T., P.I. Fieseler, D. Bindschadler, Z.J. Yu, S.R. Joy, K.K. Khurana, and M.G. Kivelson, Large Scale Changes in the Highly Relativistic Charged Particles in the Region of the Io Torus, COSPAR, pp. 68, Poland, 2000.
152. Blanco-Cano, X, C.R. Russell, R.J. Strangeway, M.G. Kivelson, and K.K. Khurana, Galileo Observations of Ion Cyclotron Waves in the Io Torus, COSPAR, pp. 68, Poland, 2000.
153. Kivelson, M.G., K.K. Khurana, C. Zimmer, M. Volwerk, and C.T. Russell, Peering at Europa's Surface and into its Interior with a Magnetometer, COSPAR, pp. 69, Poland, 2000.
154. Russell, C.T., Z.J. Yu, K.K. Khurana, and M.G. Kivelson, Magnetic Field Changes in the Inner Magnetosphere of Jupiter, COSPAR, pp. 106, Poland, 2000.
155. Kivelson, M.G., K.K. Khurana, C.T. Russell, R.J. Walker, and D.J. Southwood, Galileo Magnetometer Observations in the Jovian Magnetosphere, COSPAR, pp. 136, Poland, 2000. (I)
156. Russell, C.T., Z.J. Yu, M.G. Kivelson, and K.K. Khurana, Galileo Magnetometer Results from the Millennium Mission: Rotation Rate and Secular Variation of the Internal Magnetic Field, AAS Bulletin No. 32, 1021, 2000.
157. Yu, Z.J., C.T. Russell, M.G. Kivelson, and K.K. Khurana, Circulation of Plasma in the Jovian magnetosphere as Inferred From the Galileo Magnetometer Observations, AAS Bulletin No. 32, 1058, 2000.
158. Xochitl, B.-C. , C.T. Russell, R.J. Strangeway, M.G. Kivelson, and K.K. Khurana, Waves in the Io Torus, EOS, Trans. AGU, 82, F795, 2000.
159. Russell, C.T., X.J. Yu, M.G. Kivelson, and K.K. Khurana, Evidence for the Secular Variation of the Internal Magnetic Field of Jupiter, EOS, Trans. AGU, 82, F796, 2000.
160. Walker, R.J., T. Ogino, K.K. Khurana, M.G. Kivelson, and T.A. King, Currents in the Jovian Magnetosphere, EOS, Trans. AGU, 82, F1017, 2000.
161. Joy, S.P., R.J. Walker, M.G. Kivelson, K.K. Khurana, and C.T. Russell, A Model of the Jovian Magnetopause Derived from Spacecraft Observations and MHD Simulation Results, EOS, Trans. AGU, 82, F1017, 2000.
162. Khurana, K.K, M.G. Kivelson, and C.T. Russell, Use of Passive EM technique to Explore Oceans in Jupiter's Icy Galilean Satellites, Eos, Trans. AGU, 82(20), Spring Meet. Suppl., Abstract GP31D-03, 2001. (C)
163. Ansher, J.A., D.A. Gurnett, K.K. Khurana, and M.G. Kivelson, Determining Electron Density, Pressure, and Temperature in Jupiter's Plasma Sheet Using the Galileo Plasma Wave Instrument, Eos, Trans. AGU, 82(20), Spring Meet. Suppl., Abstract SM32D-04, 2001. (C)
164. Kivelson, M.G., S. Joy, K.K. Khurana, R.J. Walker, C.T. Russell, D.J. Southwood, and M. Dougherty, Magnetometer Results From the Joint Galileo-Cassini Observing Interval, Eos, Trans. AGU, 82(20), Spring Meet. Suppl., Abstract P52A-02, 2001. (I)
165. Volwerk, M, L. Barriere, M.G. Kivelson, K.K. Khurana, The Alfven Wing and Conductivity of Callisto, Eos, Trans. AGU, 82(20), Spring Meet. Suppl., Abstract P52A-12, 2001.
166. Khurana, K. K., Convection in Jupiter's magnetosphere, talk presented at the Spring AGU meeting in Boston, 2001.
167. Ansher, J.A., D.A. Gurnett, K.K. Khurana, and M.G. Kivelson, Determining electron density, pressure, and temperature in Jupiter's plasma sheet using the Galileo Plasma wave instrument, Jupiter Planet, Satellites & Magnetosphere, pp. 12, Colorado, 2001.(C)
168. Kivelson, M.G., D.J. Southwood, K.K. Khurana, C.T. Russell, and R.J. Walker, Jupiter's dynamic magnetosphere, Jupiter Planet, Satellites & Magnetosphere, pp. 61, Colorado, 2001. (I)
169. Volwerk, M., M.G. Kivelson, and K.K. Khurana, Detection of chlorine ions in Europa's wake, Jupiter Planet, Satellites & Magnetosphere, pp. 119, Colorado, 2001. (C)
170. Kivelson, M.G., D.J. Southwood, S. Joy, K.K. Khurana, R.J. Walker, and C.T. Russell, Joint Galileo-Cassini magnetometer observations at Jupiter, IAGA-IASPEI Joint Scientific Assembly, pp. 219, Hanoi, Vietnam, 2001. (C)
171. Kivelson, M.G., K.K. Khurana, C.T. Russell, and R.J. Walker, Magnetic signature of a polar pass over Io, Eos, Trans. AGU, 82(47), Fall Meet. Suppl., Abstract P11A-01, 2001. (I)
172. Yu, Z., C.T. Russell, K.K. Khurana, Joy, S.P., and M.G. Kivelson, Jovian internal magnetic field from singular value decomposition analysis of the Galileo magnetic measurements initial results, Eos, Trans. AGU, 82(47), Fall Meet. Suppl., Abstract P12C-0516, 2001. (C)
173. Khurana, K.K., and M.G. Kivelson, Potential for a subsurface ocean on Europa and its suitability for life,

Eos, Trans. AGU, 82(47), Fall Meet. Suppl., Abstract P21C-06, 2001. (C)

174. Joy, S.P., M.G. Kivelson, R.J. Walker, K.K. Khurana, and C.T. Russell, Characteristics of the solar wind in the vicinity of Jupiter and its impact on the Jovian magnetopause location, Eos, Trans. AGU, 82(47), Fall Meet. Suppl., Abstract SM12A-0830, 2001. (C)
175. Thompson, S.M., M.G. Kivelson, K.K. Khurana, and A. Balogh, Cluster: Quasi-periodic impulsive signatures on the dayside magnetopause, Eos, Trans. AGU, 82(47), Fall Meet. Suppl., Abstract SM22A-0789, 2001. (C)
176. Kivelson, M G, K.K. Khurana, R. Lopes, E. Turtle, Polar Passes by Io: Limits on the Internal Field and Sources of Field-Aligned Currents in the Polar cap, Eos, Trans. AGU, 83(19), Spring Meet. Suppl., Abstract P22A-03, 2002. (I)
177. Winningham, D, M.L. Goldstein, A. Fazakerley, A. Balogh, M. Acuna, K.K. Khurana, M.G. Kivelson, H. Reme, L. Kistler, G. Parks, Uni- and Bi-directional Electron Conics Observed by Cluster, Eos, Trans. AGU, 83(19), Spring Meet. Suppl., Abstract SM31A-01, 2002. (C)
178. Thompson, S.M., M.G. Kivelson, K.K. Khurana, A. Balogh, R.C. Elphic, R.L. McPherron, T.P. O'Brien, Multispacecraft studies of the structure and dynamics of the magnetotail current sheet, Eos, Trans. AGU, 83(19), Spring Meet. Suppl., Abstract SM31B-07, 2002. (C)
179. Slavin, J.A., R.P. Lepping, J. Gjerloev, D.H. Fairfield, M.H. Acuna, A. Balogh, M. Dunlop, M.G. Kivelson, K.K. Khurana, A. Fazakerley, C.J. Owen, M.L. Goldstein, H. Reme, and J.M. Bosqued, Cluster observations of a magnetic flux rope in the plasma sheet, Eos, Trans. AGU, 83(19), Spring Meet. Suppl., Abstract SM31B-11, 2002. (C)
180. Khurana, K.K., and M.G. Kivelson, Galileo in the Post-noon Sector of Jupiter's Magnetosphere, Eos, Trans. AGU, 83(19), Spring Meet. Suppl., Abstract SM41A-03, 2002. (C)
181. Ansher, J.A., K.K. Khurana, D.A. Gurnett, D.L. Holland, M.G. Kivelson, R.F. Martin, and A.M. Persoon, Comparing Galileo electron density measurements to the Khurana and Kivelson Jovian current sheet model, Eos, Trans. AGU, 83(19), Spring Meet. Suppl., Abstract SM41A-05, 2002. (C)
182. McPherron, R.L., M.G. Kivelson, K. Khurana, A. Balogh, M. Connors, F. Creutzberg, M. Moldwin, G. Rostoker, C. Russell, Cluster observations of currents in the plasma sheet during substorm expansions, Geophysical Research Abstracts, Vol. 4, Abstract EAE02-A-05116, EGS-AGU-EUG Joint Assembly, Nice, France, 2002. (C)
183. Khurana K K., R. L. McPherron, M. G. Kivelson, M. W. Dunlop and A. Balogh, Fine Structure and Dynamics of the magnetotail current, Geophysical Research Abstracts, Vol. 4, Abstract EAE02-A-05124, EGS-AGU-EUG Joint Assembly, Nice, France, 2002. (C)
184. Khurana, K. K., Local Time Magnetic Field Asymmetries in Jupiter's Magnetosphere, talk presented at the "Eurojove" conference Held in Lisbon, June, 17-21, 2002.
185. Khurana, K.K., M.G. Kivelson, C.T. Russell, R.J. Walker, and S. Joy, Io's magnetic field, Geophysical Research Abstracts, Vol. 4, Abstract EAE02-A-05119, EGS-AGU-EUG Joint Assembly, Nice, France, 2002. (C)
186. Russell, C.T., Z.J. Yu, K.K. Khurana, S.P. Joy, and M.G. Kivelson, The secular variation of the Jovian intrinsic magnetic field, Geophysical Research Abstracts, Vol. 4, Abstract EAE02-A-000609, EGS-AGU-EUG Joint Assembly, Nice, France, 2002.
187. Kivelson, M.G., R.L. McPherron, S. Thompson, K.K. Khurana, J. Weygand, and A. Balogh, The response of the near earth magnetotail to substorm activity, COSPAR02-A-01746, 34th COSPAR Scientific Assembly at the World Space Congress, Houston, TX, October, 2002. (C)
188. Khurana, K K., R. L. McPherron, M. G. Kivelson, S. Thomson, M. W. Dunlop and A. Balogh, The morphology and dynamics of the nightside current sheet, COSPAR meeting, 2002, Houston, Texas. (C)
189. Khurana, K. K, Tsyganenko, N. A., A Global Model of Jupiter's Magnetospheric Field, talk presented at the fall meeting of AGU, San Francisco, 2002. (C)
190. Yu, Z.J., C.T. Russell, G. Giampieri, M.K. Dougherty, K.K. Khurana, and M.G. Kivelson, On inverting the magnetic field of Jupiter and Saturn, Eos Trans. AGU, 83(47), Fall Meet. Suppl., Abstract P21B-0378, 2002. (C)
191. Thompson, S.M., M.G. Kivelson, K.K. Khurana, R.L. McPherron, and A. Balogh, Characteristics of the magnetotail current density fro, Cluster observations, Eos Trans. AGU, 83(47), Fall Meet. Suppl., Abstract SM21D-04, 2002. (C)
192. Taylor, D.J., K.K. Khurana, and M.G. Kivelson, A new model of the structure of the neutral current sheet of the Jovian magnetosphere, Eos Trans. AGU, 83(47), Fall Meet. Suppl., Abstract SM11D-02, 2002. (C)
193. Kivelson, M.G., and K.K. Khurana, Magnetic sounding of the Galilean satellites, Eos Trans. AGU, 83(47), Fall Meet. Suppl., Abstract P12C-02, 2002. (I)
194. Weygand, J.M., M.G. Kivelson, K.K. Khurana, R.L. McPherron, A. Balogh, M.L. Goldstein, J. Borovsky, D.A. Roberts, and H. Laakso, The nature of fluctuations observed by Cluster in the plasma sheet, Eos Trans. AGU, 83(47), Fall Meet. Suppl., Abstract SM72A-0604, 2002. (C)
195. McPherron, R.L., M.G. Kivelson, K. Khurana, S. Thompson, O. Amm, J. Baker, A. Balogh, H. Reme, M. Connors, F. Creutzberg, I. Dandouras, I. Mann, D.

Milling, M. Moldwin, G. Rostoker, C. Russell, H. Singer, A comparison of Cluster observations of the tail current during substorms and quiet times, Eos Trans. AGU, 83(47), Fall Meet. Suppl., Abstract SM71A-0574, 2002.

196. Thompson, S., M.G. Kivelson, K.K. Khurana, R.L. McPherron, A. Balogh, H. Reme, L. Kistler, and J. Weygand, Multispace studies of the structure and dynamics of the magnetotail current sheet, Geophysical Research Abstracts, Vol. 5, Abstract EAE03-A-00507, EGS-AGU-EUG Joint Assembly, Nice, France, 2003. (C)
197. Russell, C.T., M.G. Kivelson, and K.K. Khurana, Depleted flux tubes in the Jovian magnetosphere, Geophysical Research Abstracts, Vol. 5, Abstract EAE03-A-03144, EGS-AGU-EUG Joint Assembly, Nice, France, 2003. (C)
198. Weygand, J.M., M.G. Kivelson, K.K. Khurana, R.L. McPherron, H.J. Schwarzl, S. Thompson, M.L. Goldstein, J. Borovsky, A. Balogh, and D.A. Roberts, The nature of fluctuations observed by Cluster in the plasma sheet, Geophysical Research Abstracts, Vol. 5, Abstract EAE03-A-00228, EGS-AGU-EUG Joint Assembly, Nice, France, 2003. (C)
199. Schilling, N., K.K. Khurana, and M.G. Kivelson, Limits on an intrinsic dipole moment in Europa, Geophysical Research Abstracts, Vol. 5, Abstract EAE03-A-09285, EGS-AGU-EUG Joint Assembly, Nice, France, 2003.
200. McPherron, R.L., D.N. Baker, S. Thompson, M.G. Kivelson, K.K. Khurana, A. Balogh and H. Reme, Cluster observations of the dynamics of the tail current during substorm, IUGG 2003 Sapporo Japan, Abstract GAIII.05/08A/A06-004, 2003. (C)
201. M.G. Kivelson, S. M. Thompson, K.K. Khurana, A. Balogh, H. Reme, A. N. Fazakerley, L. Kistler, Cluster observations of quasi-periodic impulsive signatures in the dayside northern lobe: High latitude flux transfer events?, 6th Cluster Workshop, ESTEC, Holland, 2003.
202. Khurana, K.K., Tsyganenko, N. A., Schwarzl, H. K., A New Jovian Magnetospheric Field Model for Galileo and Jupiter Icy Moon Orbiter (JIMO) Missions, Talk presented at the Fall AGU meeting in San Francisco, 2003. (C)
203. Thompson, S.M., M.G. Kivelson, K.K. Khurana, R.L. McPherron, B, A. Balogh, and T. Hsu, Cluster: Bifurcated current sheets and substorm dynamics, Eos Trans. AGU, 84 (46), Fall Meet. Suppl., Abstract SM21B-0199, 2003. (C)
204. Russell, C.T., M.G. Kivelson, and K.K. Khurana, Statistics of depleted flux tubes in the Jovian magnetosphere, Eos Trans. AGU, 84 (46), Fall Meet. Suppl., Abstract SM22B-0252, 2003. (C)
205. McPherron, R.L., D.N. Baker, M.G. Kivelson, K.K. Khurana, A. Balogh, H. Reme, I. Dandouras, H. Singer, and E. Donovan, Cluster observations of a near-earth neutral line on August 27, 2001, Eos Trans. AGU, 84 (46), Fall Meet. Suppl., Abstract SM31A-03, 2003. (C)
206. Weygand, J.M., M.G. Kivelson, K.K. Khurana, R.L. McPherron, L.M. Kistler, A. Balogh, and S. Thompson, Probability distribution functions for magnetic field fluctuations inferred from Cluster measurements: Evidence for intermittent turbulence in the plasma sheet, Eos Trans. AGU, 84 (46), Fall Meet. Suppl., Abstract SM32C-02, 2003. (C)
207. Yu, Z.J.; C.T. Russell, K.K. Khurana, and M.G. Kivelson, The rotation period of Jupiter from Galileo magnetic field observations, Geophysical Research Abstract, Vol 6, Abstract EGU04-A-04494, April, 2004. (C)
208. Schwarzl, H.K., K.K. Khurana, M.G. Kivelson, A. Balogh, Intercalibration of the Magnetometers Onboard the CLUSTER Spacecraft from Natural Constraints, Eos Trans. AGU, 85 (17), Jt. Assem. Suppl., Abstract SM43C-05, 2004. (C)
209. Khurana, K. K., and Schwarzl, H.K., The local time variations of Jupiter's current sheet location and thickness, talk presented at the spring meeting of AGU held in Montreal, Canada, 2004. (C)
210. Weygand, J.M., M.G. Kivelson, KK. Khurana, R.L. McPherron, L. Kistler, A. Balogh, H. Schwarzl, S. Thompson, A multifractal analysis of magnetic field fluctuations inferred from Cluster measurements: Evidence for intermittent turbulence in the plasma sheet, Eos Trans. AGU, 85 (17), Jt. Assem. Suppl., Abstract SM41C-02, 2004. (C)
211. Volwerk, M., C. Paranicas, M.G. Kivelson, and K.K. Khurana, Europa's Interaction with Jupiter's Magnetosphere: The Wake Region, COSPAR04-A-00313, 35th COSPAR Scientific Assembly, Paris, France, 18-25 July, 2004. (C)
212. Yu, Z.J., C.T. Russell, K.K. Khurana, and M.G. Kivelson, Rotational period of Jupiter from the observations of its magnetic field, COSPAR04-A-00801, 35th COSPAR Scientific Assembly, Paris, France, 18-25 July, 2004. (C)
213. Volwerk, M., K.K. Khurana, and M.G. Kivelson, (2004), Europa's Alfven Wing: Shrinking and Displacement by an induced Magnetic Field, Eos Trans. AGU, 85(47), Fall Meet. Suppl., Abstract P31A-0969.
214. Schwarzl, H., J.M. Weygand, M.G. Kivelson, K.K. Khurana, R.L. McPherron, L. Kistler, A. Balogh, and S. Thompson, (2004), Multifractal analysis of magnetic field fluctuations inferred Cluster and Solar Wind Measurements: Evidence for Intermittent Turbulence in the Plasma Sheet and Solar Wind, Eos Trans. AGU, 85(47), Fall Meet. Suppl., Abstract SM11A-1165.
215. Khurana, K. K., C. S. Arridge, M. K. Dougherty, A new global model of Saturn's magnetospheric field, talk

presented at the Fall AGU meeting, San Francisco, 2004.

216. Khurana, K. K., C. S. Arridge, M. K. Dougherty, A versatile model of Saturn's magnetospheric field, Poster presented at the EGU meeting in Vienna, Austria, April 28, 2005.

217. Joy, S. P.; Kivelson, M. G.; Walker, R. J.; Khurana, K. K.; Russell, C. T.; Paterson, W. R., Mirror Mode Structures in the Jovian Magnetosheath: Lessons for Earth Observers, American Geophysical Union, Fall Meeting 2006, abstract #SM51C-1417.

218. Leisner, J. S.; Khurana, K. K.; Russell, C. T.; Dougherty, M. K.; Persoon, A. M.; Blanco-Cano, X.; Strangeway, R. J., Observations of Enceladus and Dione as Sources for Saturn's Neutral Cloud, 38th Lunar and Planetary Science Conference, (Lunar and Planetary Science XXXVIII), held March 12-16, 2007 in League City, Texas. LPI Contribution No. 1338, p.1425

Invited Talks (All presented by Khurana)

1. Khurana, K.K. The structure and composition of the Jovian plasma sheet. Proceedings of 3rd Neil Brice Memorial Symposium on the Magnetospheres of the Outer Planets, p. 8. Lindau, Federal Republic of Germany, October 10-13, 1988 (1988).
2. Khurana K. K., Galileo Flyby of the Earth and Venus Magnetospheres, Invited lecture delivered in the Third Annual Summer School for Planetary Science at Caltech, Pasadena, August 12, 1991.
3. Khurana, K.K. ULF waves in other magnetospheres: Observations and possible source mechanisms. Proceedings of 20th General Assembly of the IUGG. Vienna, Austria August 22, 1991.
4. Khurana, K.K. Latest results from the Galileo Earth-1 and Earth-2 encounters. 20th General Assembly of the IUGG, Wiesbaden, Germany Annales Geophysicae V11, Suppl 3, c354 (1993).
5. Khurana, K. K., M. G. Kivelson, C. T. Russell, R. J. Walker, J. Warnecke, S. Joy, J. A. Linker, and D. J. Southwood, Recent results from the Galileo magnetometer, October 24, 1996, Bulletin of the AAS, 28, 1055, 1996.
6. Khurana, K. K. Galileo's Great Adventure, Magnetometer results from the satellite flybys, Planetary Society event in conjunction with the DPS meeting in Phoenix, Arizona, 1996.
7. Khurana, K. K., Currents in rotation dominated magnetospheres, Magnetospheres of the Outer Planets Abstract volume p. 17, Meeting held in Boulder, Colorado, 1997.
8. Khurana K. K., Magnetic fields and plasmas near the Galilean moons of Jupiter, IGPP seminar series, June 3, 1997.
9. Khurana, K. K., Structure of Jupiter's magnetosphere as revealed by Galileo, presented at the 8th IAGA assembly held in Uppsala, Sweden, Abstract Book, p. 446, 1997.
10. Khurana, K. K., and M. G. Kivelson, Does Io Possess an internal magnetic field?, presented at the EGS meeting in Nice, France, EGS News letter, 66, 240, 1998.
11. Khurana, K.K., Europa's Field and Plasma Environment, Invited Presentation to The Space Studies Board (Committee on Lunar and Planetary Exploration) on Europa Orbiter, Feb. 26, 1998. Tempe, Az..
12. Khurana, K.K., M Kivelson, C. T. Russell, R. Walker, D. Southwood, .J Warnecke, L Bennett, S. Joy, M Volwerk, IGPP seminar Series, April 9, 1998.
13. Khurana, K. K., and M. G. Kivelson, The structure of Jupiter's magnetosphere: New observations from Galileo, presented at the EGS meeting in Nice, France, EGS News letter, 66, 240, 1998.
14. Khurana, K.K., and M.G. Kivelson, The currents in Jupiter's magnetosphere: A new look from Galileo, C3.2/D0.9-0010, pp. 168, COSPAR, Japan, 1998.
15. Kivelson, M. G. and K. K. Khurana, The Galilean moons: A new look at their field and plasma environment, Presented at the Western Pacific AGU meeting in Taipei, Taiwan, 1998.
16. Khurana, K. K., The Structure and Dynamics of Jupiter's Magnetosphere: New Observations, Presented at the Western Pacific AGU meeting in Taipei, Taiwan, 1998.
17. Khurana, K.K., The Global Currents in Jupiter's Magnetosphere, Presented at the Chapman Conference, Kona, Hawaii, 1999.
18. Khurana, K.K., The configuration of Jupiter's magnetosphere as deduced from Galileo's Magnetic field observations, presented at the EGS meeting in The Hague, 19-23 April 1999.
19. Khurana, K.K., Asymmetries and Variations in Jupiter's Magnetosphere, presented at the EGS meeting in Nice, France, 2000.
20. Khurana, K.K., A Geophysicist's Tale: Induced Magnetic Fields, an Ocean on Europa, and Questions on Extraterrestrial Life, IGPP talk, UCLA, 10-Oct-2000.
21. Khurana, K.K., Plasma Convection in Jupiter's Magnetosphere, Invited lecture presented at Laboratory for Atmospheric and Space Physics, Colorado Univ., Boulder, March 8, 2001.
22. Khurana, K. K., An ocean on Europa, Invited lecture presented in Department of Astrophysical and Planetary Sciences, Colorado Univ., Boulder, March 8, 2001.
23. Khurana, K.K., Transport of Field and Plasma in Jupiter's Magnetosphere, Invited talk presented at the EGS meeting in Nice, France, March 25-30, 2001.
24. Khurana, K. K., W. B. Banerdt, T. V. Johnson, C. T. Russell, M. G. Kivelson, P. M. Davis, J. E. Vidale,

Sounding of icy Galilean satellites using surface observatories, Invited paper presented at the FORUM ON INNOVATIVE APPROACHES TO OUTER PLANETARY EXPLORATION, Lunar and Planetary Institute, Houston, February 21-22, 2001.

25. Khurana, K. K., Exploring the interiors of Galilean moons with a magnetometer, Invited talk presented at the GSA meeting held in Universal City, California, 2001.
26. Khurana, K. K., Magnetospheres of the outer planets, Invited Reporter review presented at the IAGA meeting in Hanoi, Vietnam, 2001.
27. Khurana, K. K, Transport of field and plasma in Jupiter's magnetosphere, Invited talk presented at the EGS meeting in Nice, 2001.
28. Khurana, K.K. and Kivelson, M. G., Potential for a subsurface ocean on Europa and its suitability for life, Invited talk presented at the fall meeting of AGU, San Francisco, 2001.
29. Khurana, K.K., M. G. Kivelson, C. T. Russell, R. J. Walker, and S. Joy, Io's magnetic field, Invited talk presented at the EGS meeting in Nice, 2002.
30. Khurana, K. K., Structure and dynamics of Jupiter's magnetosphere, Invited talk presented at the Western Pacific AGU meeting held in New Zealand, 2002.
31. Khurana, K. K., A new view of Jupiter's magnetosphere, Invited talk presented in the ESS Dept., UCLA, May, 10, 2002.
32. Khurana, K. K., A comparative view of current systems in the planetary magnetospheres, Invited talk presented at the Magnetospheres of the Outer Planets, Applied Physics Lab., Maryland, July 29, 2002.
33. Khurana, K. K., Tsyganenko, N. A., Towards a global model of Jupiter's magnetosphere derived from observations from Galileo and previous missions, Invited talk presented at the Joint EGS/AGU assembly, Nice, France, April 7, 2003.
34. Khurana, K. K., Magnetospheres of other Planets, Reporter Review, IUGG meeting Held in Sapporo, Japan, July 4, 2003.
35. Khurana, K. K., W S. Kurth, J F. Cooper, J. H Waite, Jr., J E. P. Connerney, J L. Green, F Crary, W R. Paterson, R. E. Johnson, C. Paranicas and B H. Mauk, Field and plasma science with Jupiter Icy Moon Orbiter (JIMO), Invited talk presented at the fall AGU meeting, 2003.
36. Khurana, K. K., The discovery of liquid oceans in the icy Galilean satellites of Jupiter, Invited seminar presented at the Department of Astronomy, Boston University, Nov. 6, 2003.
37. Khurana, K. K., Evolution of the surfaces and atmospheres of the icy Galilean satellite, Distinguished Researcher Award UCLA/IGPP invited talk presented on June 15, 2004.
38. Khurana, K. K., Using magnetic induction to explore liquid water in icy satellites, Invited talk presented at the fall AGU meeting in San Francisco, 2004.
39. Khurana, K. K., The Jovian magnetosphere, lessons learned from Galileo, Invited talk presented at the EGU meeting held in Vienna, Austria, April, 29, 2005.
40. Khurana, KK, Magnetospheres of Giant Planets, Invited talk presented at the COSPAR meeting held in Beijing, July 22, 2006.