

**Presentations of Louis A. Frank
at National and International Meetings
1993-Present**

**The University of Iowa
Department of Physics and Astronomy
Iowa City, IA**

1993

1. Frank, L. A., J. B. Sigwarth, D. J. Williams, E. C. Roelof, D. G. Mitchell, R. E. Gold, E. P. Keath, B. H. Mauk, C.-I. Meng, D. L. Carpenter, B. K. Hultqvist, R. N. Lundin, G. L. Siscoe, R. A. Wolf, D. J. Gorney, M. Schulz, D. J. McComas, H. O. Funsten, K. R. Moore, B. W. Smith, J. D. Craven, Y. T. Chiu, R. R. Meier and J. F. Seely, *Imagers for the Magnetosphere, Aurora and Plasmasphere (IMAP)*, presented at SPIE's 1993 International Symposium on Optics, Imaging, and Instrumentation, Instrumentation for Magnetospheric Imagery II, San Diego, California, 11-16 July 1993.
2. Frank, L. A., W. R. Paterson and M. G. Kivelson, *Galileo Observations of Plasmas in Earth's Magnetotail and in the Vicinity of Gaspra*, EOS, 74(16), 199, 1993.
3. Fuji, R., R. A. Hoffman, P. Anderson, J. D. Craven, M. Sugiura, L. A. Frank and N. Maynard, *Electrodynamic Parameters in the Nighttime Sector During Auroral Substorms*, EOS, 74(16), 260, 1993.
4. Huang, C. Y. and L. A. Frank, *Plasma Pressures in the Plasma Sheet*, EOS, 74(16), 268, 1993.
5. Frank, L. A., W. R. Paterson, K. L. Ackerson, S. Kokubun and D. H. Fairfield, *Plasma Observations in the Distant Magnetotail With the Geotail Spacecraft*, EOS, 74(16), 269, 1993.
6. Paterson, W. R., L. A. Frank and K. L. Ackerson, *Plasma Moments From the Geotail Mission*, EOS, 74(16), 269, 1993.
7. Craven, J. D., A. C. Nicholas and L. A. Frank, *Spatial and Temporal Variations of the FUV Dayglow Following Enhanced Auroral Activity*, EOS, 74(43), 476, 1993.
8. Ishii, M, T. Iyemori, K. Kimura, M. Sugiura, J. A. Slavin, J. D. Craven, L. A. Frank and J. D. Winningham, *Quantitative Relationship Between the Auroral Luminosity and the Ionospheric Conductivity in the Polar Regions*, EOS, 74(43), 508, 1993.

9. Seon, J., L. A. Frank, J. T. Gosling, A. J. Lazarus, R. P. Lepping and C. T. Russell, Solar Wind Control of Tailward Flank Side Magnetospheric Dynamics, EOS, 74(43), 514, 1993.
10. DeCoster, R. J., J. Chen, K. J. Farrey, L. A. Frank and C. Y. Huang, Asymmetries in the Ion Distributions of the Plasma Sheet Boundary Layer, EOS, 74(43), 519, 1993.
11. Coroniti, F. V., L. A. Frank, W. R. Paterson, K. L. Ackerson, M. Ashour-Abdalla, S. Kokubun and D. H. Fairfield, Plasma Distributions at the Distant Tail Lobe-Plasma Sheet Interface Measured by the GEOTAIL Comprehensive Plasma Instrumentation, EOS, 74(43), 527, 1993.
12. Ashour-Abdalla, M., L. A. Frank, W. R. Paterson, K. L. Ackerson, F. V. Coroniti, L. M. Zelenyi, S. Kokubun, D. H. Fairfield and A. J. Lazarus, On Cold Ion Beams in the Distant Tail, EOS, 74(43), 528, 1993.
13. Siscoe, G. L., L. A. Frank, K. L. Ackerson, W. R. Paterson and M. Ashour-Abdalla, Interpretation of Long-Period, Velocity Dispersive Plasma Events at 100 R_E and Beyond in Terms of Comparison With an Expansion Fan Model, EOS, 74(43), 528, 1993.
14. Matsumoto, H., H. Kojima, T. Miyatake, Y. Omura, M. Okada, L. A. Frank and W. R. Paterson, Nature of the Broadband Electrostatic Wave in the Magnetotail, EOS, 74(43), 532, 1993.
15. Kojima, H., I. Nagano, A. Fujita, H. Matsumoto, S. Kokubun, T. Yamamoto, L. A. Frank and W. R. Paterson, Plasma Wave Features of the Boundary Layers in the Magnetosphere, EOS, 74(43), 533, 1993.
16. Frank, L. A., W. R. Paterson, K. L. Ackerson, S. Kokubun, M. Ashour-Abdalla, F. V. Coroniti, G. L. Siscoe, D. H. Fairfield, R. P. Lepping and A. J. Lazarus, Recent Results From Plasma Measurements in Earth's Magnetotail and its Environs With the Geotail Spacecraft, EOS, 74(43), 533, 1993.
17. Williams, D. J., R. E. Gold, S. M. Krimigis, A. T. Y. Lui, R. W. McEntire, C.-I. Meng, E. C. Roelof, S. P. Christon, F. M. Ipavich, G. Gloeckler, T. P. Armstrong, F. Gliem, L. J. Lanzerotti, E. T. Sarris, D. H. Fairfield, S. Kokubun, T. Yamamoto and L. A. Frank, Investigation of Energetic Particle Phenomena on October 27, 1992 in the Distant Magnetotail by GEOTAIL/EPIC, EOS, 74(43), 533, 1993.
18. Shodhan, S., G. Siscoe, L. A. Frank, K. L. Ackerson, W. R. Paterson, K. Paularena, J. D. Richardson, A. J. Lazarus and R. P. Lepping, Tail Positions for Geotail Observations, EOS, 74(43), 534, 1993.

19. Kaymaz, Z., G. Siscoe, L. A. Frank, K. L. Ackerson, W. R. Paterson and R. P. Lepping, Dawn-Dusk Flows in the Magnetotail: Predictions and Geotail Observations, EOS, 74(43), 534, 1993.
20. Paterson, W. R. and L. A. Frank, Survey of Magnetotail Plasmas With the Comprehensive Plasma Instrumentation Aboard the Geotail Spacecraft, EOS, 74(43), 534, 1993.
21. Ackerson, K. L., L. A. Frank, W. R. Paterson, S. Kokubun, M. Ashour-Abdalla, F. V. Coroniti, G. L. Siscoe, A. J. Lazarus, D. H. Fairfield and R. P. Lepping, Geotail Observations of the Presence of Solar Wind Ion Velocity Distributions in the Downstream Magnetosheath, EOS, 74(43), 534, 1993.
22. Nishimura, O., H. Matsumoto, R. R. Anderson, L. A. Frank, W. R. Paterson, S. Kokubun and T. Yamamoto, Electromagnetic Electron Cyclotron Harmonic Waves Near the Magnetopause Observed by GEOTAIL, EOS, 74(43), 535, 1993.
23. Fujita, A., H. Kojima, H. Matsumoto, S. Kokubun, T. Yamamoto, L. A. Frank and W. R. Paterson, Wave Signatures During the Plasmoid Encounters Observed by GEOTAIL, EOS, 74(43), 535, 1993.
24. Huang, C. Y. and L. A. Frank, Anomalous Temperature Gradients in the Central Plasma Sheet, EOS, 74(43), 544, 1993.
25. Spence, H. E., L. A. Frank, W. R. Paterson and M. G. Kivelson, The Galileo Earth-1 Flyby: Comparison of the Finite Width Tail Convection Model With Observations, EOS, 74(43), 544, 1993.

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26. Meier, R. R., R. Cox, D. J. Strickland, J. D. Craven and L. A. Frank, Interpretation of Dynamics Explorer Far UV Images of the Quiet Time Thermosphere, EOS, 75(16), 250, 1994.
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28. Hammond, C. M., G. K. Crawford, J. L. Phillips, A. Balogh, H. Kojima, H. Matsumoto, L. A. Frank, S. Kokubun and T. Yamamoto, Observations of the Polytopic Index Inside Coronal Mass Ejections: Ulysses and Geotail Observations, EOS, 75(16), 262, 1994.

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31. Frank, L. A., Images of Earth's Auroras: The Past, the Present and the Future, EOS, 75(16), 278, 1994.
32. Craven, J. D. and L. A. Frank, Asymmetric Expansion of the Auroral Bulge in Substorms, EOS, 75(16), 307, 1994.
33. Frank, L. A., W. R. Paterson, K. L. Ackerson, S. Kokubun, T. Yamamoto, D. H. Fairfield and R. P. Lepping, Observations of Plasmas Associated With the Magnetic Signatures of Plasmoids in the Distant Magnetotail, EOS, 75(16), 308, 1994.
34. Lui, A. T. Y., D. J. Williams, R. W. McEntire, C. Jacquey, V. Angelopoulos, E. C. Roelof, S. P. Christon, L. A. Frank, W. R. Paterson, K. L. Ackerson, R. R. Anderson, S. Kokubun, T. Yamamoto, K. Tsuruda, H. Matsumoto and H. Kojima, Energetic Particle Activity Associated With Field-Aligned Current Structures Detected by Geotail, EOS, 75(16), 308, 1994.
35. Huang, C. Y., J. D. Craven, L. A. Frank and R. L. Dyson, Simultaneous Observations of Substorm Onset, EOS, 75(16), 308, 1994.
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38. Ashour-Abdalla, M., L. A. Frank, W. R. Paterson, L. M. Zelenyi, J. Berchem, F. V. Coroniti, J. M. Bosqued, M. G. Kivelson, S. Kokubun and T. Yamamoto, Manifestations of Nonlinear Ion Dynamics in Distributions Observed in the Earth's Magnetotail, EOS, 75(16), 309, 1994.
39. Kaymaz, Z., G. L. Siscoe, L. A. Frank, K. L. Ackerson, J. R. Spreiter and S. S. Stahara, Geotail Magnetosheath Observations of Solar Wind Discontinuities, EOS, 75(16), 309, 1994.

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41. Hembroff, D. W., J. D. Craven and L. A. Frank, The Instantaneous Global Pattern of Auroral Electron Precipitation for $AE < 100$ nT, EOS, 75(16), 315, 1994.
42. Frank, L. A., W. R. Paterson, K. L. Ackerson, S. Kokubun, M. G. Kivelson and T. Yamamoto, Ion Velocity Distributions in the Vicinity of the Current Sheet in Earth's Distant Magnetotail, presented at the International Conference on Substorms-2, Fairbanks, Alaska, 7-11 March 1994.
43. Ashour-Abdalla, M., L. M. Zelenyi, J. M. Bosqued, F. V. Coroniti, J. Dandouras and L. A. Frank, Structure of Ion Flows in the Earth's Magnetotail, presented at the International Conference on Substorms-2, Fairbanks, Alaska, 7-11 March 1994.
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46. Shodhan, S., G. L. Siscoe, L. A. Frank, K. L. Ackerson and W. R. Paterson, A Parametric Study of the Slowmode Expansion Fan as a Model of the High-Latitude Boundary Layer: Comparisons with Geotail Data, presented at the Chapman Conference, Physics of the Magnetopause, San Diego, California, 14-18 March 1994.
47. Frank, L. A., W. R. Paterson, K. L. Ackerson, S. Kokubun, T. Yamamoto, D. H. Fairfield and R. P. Lepping, Observations of Plasmas Associated With Magnetic Signatures of Plasmoids in the Distant Magnetotail With the Geotail Spacecraft, presented at the Eighth International Symposium on Solar Terrestrial Physics, Sendai, Japan, 5-10 June 1994.
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49. Kojima, H., A. Hamada, A. Fujita, H. Matsumoto, I. Nagano, L. A. Frank, T. Mukai, T. Yamamoto, S. Kokubun, W. R. Paterson, S. Machida and Y. Saito, Plasma Wave Features in the Geomagnetic Tail Regions: Geotail

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51. Matsumoto, H., H. Usui, H. Kojima, J. Koizumi, O. Nishimura, T. Yamamoto, S. Kokubun, K. Tsuruda, T. Mukai, L. A. Frank and W. R. Paterson, Electron Cyclotron Harmonic Waves Observed With Geotail, presented at the Eighth International Symposium on Solar Terrestrial Physics, Sendai, Japan, 5-10 June 1994.
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53. Khurana, K. K., M. G. Kivelson and L. A. Frank, The Relationship of Magnetic Flux Ropes to Substorms, presented at the 30th COSPAR Scientific Assembly, Hamburg, Germany, 11-21 July 1994.
54. Lui, A. T. Y., D. J. Williams, R. W. McEntire, C. Jacquey, V. Angelopoulos, E. C. Roelof, S. M. Krimigis, C.-I. Meng, S. P. Christon, F. M. Ipavich, G. Gloeckler, T. P. Armstrong, L. J. Lanzerotti, E. T. Sarris, S. Kokubun, L. A. Frank, K. L. Ackerson, W. R. Paterson, T. Yamamoto, T. Mukai and K. Tsuruda, Initial Investigation of Energetic Particle Phenomena in the Distant Magnetotail From Geotail/EPIC, presented at the 30th COSPAR Scientific Assembly, Hamburg, Germany, 11-21 July 1994.
55. Frank, L. A., The Galileo Mission to Jupiter: The Magnetospheric Objectives, presented at The International Symposium on The Magnetospheres of the Outer Planets 1994, Graz, Austria, 8-12 August 1994.
56. Frank, L. A., W. R. Paterson, M. Ashour-Abdalla, J. Berchem, J. Raeder, F. V. Coroniti, G. L. Siscoe, S. Shodhan, A. J. Lazarus, K. Paularena, K. L. Ackerson, S. Kokubun, T. Yamamoto, R. P. Lepping and D. H. Fairfield, Plasma Observations With the Comprehensive Plasma Instrumentation (CPI) on Board the Geotail Spacecraft in the Magnetotail: Nonadiabatic Acceleration of Ions, Magnetotail Breathing, Wind Sock Effect, Currents in Magnetic Flux Ropes, Ion Beamlets, Fractal Analysis of Velocity Distributions, Comparisons With MHD Modeling, and Two-Component Ion Velocity Distributions in the Magnetosheath, presented at the Second

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58. Kokubun, S., Y. Kamide, R. Nakamura, T. Yamamoto, K. Tsuruda, T. Mukai, A. Nishida, H. Matsumoto, L. A. Frank and W. R. Paterson, Structure of the Distant Magnetotail During the Main Phase of Magnetic Storm, EOS, 75(44), 538, 1994.
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67. Craven, J. D., G. K. Parks and L. A. Frank, Magnetic Mapping Between the Poleward Boundaries of the Auroral Oval and the Plasma Sheet, EOS, 75(44), 564, 1994.
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73. Ashour-Abdalla, M., L. M. Zelenyi, L. A. Frank and W. R. Paterson, Chaos and Regular Particle Motion in the Magnetotail, presented at the 1995 Cambridge Workshop/Symposium on the Physics of Space Plasmas, Bermuda, 20-25 February 1995.
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77. Craven, J. D. and L. A. Frank, Asymmetric Expansion of the Auroral Bulge in Substorms: Variations with IMF Orientation and UT, and Implications, EOS, 76(17), 262, 1995.
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83. Pulkkinen, T. I., D. N. Baker, R. J. Pellinen, J. S. Murphree and L. A. Frank, Mapping of the Auroral Oval and Individual Arcs During Substorms, Meeting Program, XXI General Assembly, International Union of Geodesy and Geophysics, Boulder, Colorado, P104, 2-14 July 1995.
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87. Yagitani, S., I. Nagano, X. Wu, S. Takase, H. Matsumoto, W. R. Paterson, L. A. Frank and R. R. Anderson, Generation and Propagation of Chorus Emissions Observed by GEOTAIL Inside the Dayside Magnetopause, presented at the Japanese SGEPPS, (Society of Geomagnetism and Earth, Planetary and Space Sciences) meeting, Kyoto, Japan, October 1995.
88. Christon, S. P., G. Gloeckler, T. E. Eastman, R. W. McEntire, E. C. Roelof, A. T. Y. Lui, D. J. Williams, L. A. Frank, W. R. Paterson, S. Kokubun, H. Matsumoto, H. Kojima, T. Mukai, Y. Saito and T. Yamamoto, Energetic Ion Charge State and Species Composition Variation With Downtail Distances in Various Magnetotail Regions, presented at the Third Geotail Workshop, Institute of Space and Astronautical Science, Sagamihara, Kanagawa, Japan, 23-25 October 1995.
89. Eastman, T. E., S. P. Christon, L. A. Frank, S. Kokubun, H. Matsumoto, T. Mukai and D. J. Williams, Identification of Magnetospheric Regions From the Geotail Spacecraft, presented at the Third Geotail Workshop, Institute of Space and Astronautical Science, Sagamihara, Kanagawa, Japan, 23-25 October 1995.
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