

Dr. Gary M. Erickson

Biography:

Gary Erickson received his B.S. (1976) and M.S. (1978) degrees in physics from Florida Atlantic University, and his Ph.D. (1985) in space physics from Rice University. After a post-doctoral appointment at Rice University (1985–1986), he was an NRC Resident Research Associate at Goddard Space Flight Center (1986–1987), a Geophysics Scholar at the Air Force Geophysical Laboratory (1987–1989), and Senior Scientist at Massachusetts Technological Laboratory (1989–1990). He came to Boston University as a Research Associate (1990–1991), taught a graduate course in magnetospheric physics, and became a member of the Research Faculty in the Department of Space Physics and Astronomy and Center for Space Physics (1991–2003). He held Visiting Faculty appointments at the Air Force Research Laboratory under the Air Force Summer Faculty Research Program (1997, 2001, 2002). He is now a Research Scientist at the Solar Observatory and Visiting Associate Professor of Physics at Prairie View A&M University (PVAMU).

Research has included both theoretical and data-analysis projects. Theoretical projects include convection in Earth's plasma sheet, the physics of the Harang discontinuity, the generation of magnetic-field-aligned currents, magnetospheric structure, and magnetopause reconnection and turbulence. The problem of the magnetospheric substorm has been a particular research focus since he elucidated the "pressure-balance inconsistency" as a graduate student. For his Ph.D. project, he developed the first computer code to model force-balanced, adiabatic, magnetospheric convection, which established the structure of the substorm growth phase. Data-analysis projects include use of data from the CRRES and Geotail satellites to describe magnetospheric substorms. The CRRES project resulted in the discovery and description of a near-Earth mechanism for the onset of magnetospheric substorms.

From 1994 until his move to PVAMU, he was a member of the science team involved in the development of the Integrated Space Weather Prediction Model (ISM) by Mission Research Corporation. The ISM code seamlessly solves for the dynamics and chemistry of Earth's ionosphere and magnetosphere from ionospheric altitudes (80 km) to 40 Earth radii sunward, 300 Earth radii anti-sunward of Earth, and 60 Earth radii in cross-section. Development of the ISM code is sponsored by the Defense Threat Reduction Agency, while its scientific applications are funded by NASA and NSF. Use of ISM by the science team has led to revolutionary new ideas about magnetospheric structure and dynamics that have been validated by ground and satellite observations.

As author or co-author, Dr. Erickson has published 47 articles in magnetospheric physics, given over 100 presentations at scientific meetings and over 20 seminars at universities and government laboratories. As a principal investigator he has overseen \$1.4M in research grants since 1991.

Education:

Rice University, Houston, Texas

Ph.D. (Space Physics and Astronomy), March, 1985

Thesis: Modeling of Plasma-Sheet Convection: Implication for Substorms

Advisor: Richard A. Wolf

Florida Atlantic University, Boca Raton, Florida

B.S. (Physics), June, 1976

M.S. (Physics), December, 1978

Thesis: Time Evolution of Truncated Solitons

According to the Korteweg-deVries Equation

Advisor: Joseph R. Cox

Professional Employment:

Visiting Associate Professor, September '05 – present

Adjunct Associate Professor, Jan '05 – May '05

and Research Scientist, May '03 – present

Prairie View A&M University, Prairie View, TX

Consultant, June '05 – present

Rice University, Houston, TX

Consultant, July '94 – June '04

Mission Research Corporation, Nashua, NH

Research Assistant Professor, June '91 – Feb '03

Center for Space Physics, Boston University, Boston, MA

Visiting Faculty, June '02 – Aug '02

Visiting Faculty, July '01 – Sept '01

Summer Faculty Fellowship Program

Air Force Research Laboratory, Hanscom AFB, MA

Consultant, June '96 – June '98

Rice University, Houston, TX

Visiting Faculty, June '97 – Aug '97

Summer Faculty Research Program

Phillips Laboratory, Hanscom AFB, MA

Research Associate, Feb '90 – May '91

and Lecturer, Spring Term, 1991

Center for Space Physics, Boston University, Boston, MA

Senior Scientist, July '89 – Feb '90

Massachusetts Technological Laboratory, Belmont, MA

Geophysics Scholar, July '87 – June '89

Air Force Geophysics Laboratory, Hanscom AFB, MA

NRC Resident Research Associate, July '86 – June '87

Goddard Space Flight Center, Greenbelt, MD

Research Associate, March '85 – June '86
Department of Space Physics and Astronomy
Rice University, Houston, TX

Research Assistant, Sept '82 – March '85
Department of Space Physics and Astronomy
Rice University, Houston, TX

Instructor, Jan '78 – May '78
Palm Beach Junior College (South Campus)
Lake Worth, FL

Professional Activities:

Member, American Geophysical Union
Member, NASA ITM Proposal Review Panel, 1994
Member, NASA SSM Proposal Review Panel, 1995, 2000
Reviewer for NASA and NSF
Reviewer for *Journal of Geophysical Research–Space Physics*, *Annales Geophysicae*,
and *Geophysical Research Letters*

References:

Prof. Richard A. Wolf
Department of Physics and Astronomy
Rice University
6100 Main Street, MS 108
Houston, TX 77005
713-348-3308; wolf@alfven.rice.edu

Prof. Bengt U. Ö. Sonnerup
Dartmouth College
Thayer School of Engineering
8000 Cummings Hall
Hanover, NH 03755-8000
603-646-2883; bengt.u.o.sonnerup@dartmouth.edu

Prof. George L. Siscoe
Center for Space Physics
Boston University
725 Commonwealth Ave.
Boston, MA 02215
978-443-8559; siscoe@bu.edu

Dr. Nelson C. Maynard
P.O. Box 7606
Gilford, NH 03247
603-293-2406; nelson.maynard@unh.edu

Dr. William J. Burke
(AFRL/VSBXP, Retired)
12 Vanderbilt Road
Acton, MA 01720
978-263-5683

Dr. Michael A. Heinemann
(AFRL/VSBXS, Retired)
183 Dillon Drive
Lyndonville, VT 05851
802-748-1552; heinemann@kingcon.com

Funded Proposals:

- NASA-SR&T, “Configuration of the Near-Earth Plasma Sheet,” \$212.8K, 6/1/91 – 5/31/94.
- NASA-SR&T, “The Influence of Global Convection on Region-1 Birkeland Current Structure,” \$168.5K, 4/1/92 – 3/31/95.
- NASA-SR&T, “The Physical Elements of Onset of the Magnetospheric Substorm,” \$145K, 6/1/94–9/30/96.
- Mission Research Corporation (NASA-SR&T prime, Nelson Maynard, PI), “Energy Coupling Between the Ionosphere and Inner Magnetosphere Related to Substorm Onset”, \$99.1K, 6/1/96 – 11/1/99.
- Boston College (AFOSR prime, Cheryl Huang, PI), “Solar Wind-Magnetosphere-Ionosphere Coupling”, \$223K, 10/1/97–9/30/00.
- NASA-SECTP (Co-I), “Signatures of Magnetopause Reconnection” (PI: George Siscoe, BU), 2 mm/yr, 4/1/99–3/31/02.
- NASA-SR&T (Co-I), “Nonlocal Coupling by Magnetospheric Currents: A Systematic MHD Study” (PI: Keith Siebert, MRC), 0.05 MY, 10/16/99–10/15/02.
- NASA-SR&T, “Substorm Evolution in the Near-Earth Plasma Sheet”, \$279.7K, 3/1/00–2/28/03.
- NASA-SR&T, “Substorm Evolution in the Near-Earth Plasma Sheet”, \$49K, 5/14/03–5/14/04.
- Rice University (NASA/Theory prime, Richard Wolf, PI), “Empirical Estimate for the Particle Distribution in the Substorm Current Wedge”, \$22K, 10/1/03 – present.
- NSF, “REU Site: Research Experiences for Undergraduates in the Sun-Earth Space Environment” (PI: Tian-Sen Huang), 1.5 mm/yr through 1/1/08.
- NASA-Geospace Science SR&T, “The Role of Interchange in Geomagnetic Activity”, \$335K, 5/1/06–4/30/08.

Refereed Publications:

- Erickson, G. M., and R. A. Wolf, Is Steady Convection Possible in the Earth’s Magnetotail?, *Geophys. Res. Lett.*, 7, 897, 1980.
- Erickson, G. M., On the Cause of X-line Formation in the Near-Earth Plasma Sheet: Results of Adiabatic Convection of Plasma-Sheet Plasma, in *Magnetic Reconnection in Space and Laboratory Plasmas, Geophys. Monogr. Ser.*, vol. 30, edited by E. W. Hones, Jr., pp. 296–302, American Geophysical Union, Washington, D.C., 1984.
- Erickson, G. M., R. W. Spiro, and R. A. Wolf, The Physics of the Harang Discontinuity, *J. Geophys. Res.*, 96, 1633, 1991.
- Erickson, G. M., A Quasi-Static Magnetospheric Convection Model in Two Dimensions, *J. Geophys. Res.*, 97, 6505, 1992.
- Erickson, G. M., R. W. Spiro, and R. A. Wolf, The Harang Discontinuity and Magnetospheric Forecasting, in *Solar-Terrestrial Predictions-IV, Vol. 2*, edited by J. Hruska, M. A. Shea, D. F. Smart, and G. Heckman, pp. 508–523, NOAA, Boulder, 1993.
- Smith, M. F., F. Herrero, M. Hesse, D. N. Baker, P. Bochsler, P. Wurz, H. Balsiger, S. Chakrabarti, G. Erickson, D. Cotton, T. S. Stephen, C. Jamar, J. C. Gerard, S. A. Fuselier, A. G. Ghielmetti, S. B. Mende, W. K. Peterson, E. G. Shelly, R. R. Vondrak, D. L. Gallagher, T. E. Moore, C. Pollock, R. Arnoldy, M. Lockwood, and R. Gladstone, The High-Latitude Ion Transport and Energetics (HI-LITE) Explorer: A mission to investigate ion outflow from the high-latitude ionosphere, in *Instrumentation for Magnetospheric Imagery II*, SPIE, vol. 2008, 1993.

- Burke, W. J., J. S. Machuzak, N. C. Maynard, E. M. Basinska, G. M. Erickson, R. A. Hoffman, J. A. Slavin, and W. B. Hanson, Electrodynamic Signatures of the Plasma Sheet Boundary Layer in the Evening Ionosphere, in *Physical Signatures of Magnetospheric Boundary Layer Processes*, Vol. 425, NATO Advanced Science Institute Series, edited by J. A. Holtet, and A. Egeland, pp. 111–123, Kluwer Academic Publishers, Dordrecht, 1994.
- Burke, W. J., J. S. Machuzak, N. C. Maynard, E. M. Basinska, G. M. Erickson, R. A. Hoffman, J. A. Slavin, and W. B. Hanson, Auroral Signatures of the Plasma Sheet Boundary Layer in the Evening Sector, *J. Geophys. Res.*, *99*, 2489, 1994.
- Heinemann, M., G. M. Erickson, and D. H. Pontius, Jr., Inertial Currents in Isotropic Plasma, *J. Geophys. Res.*, *99*, 8635, 1994.
- Erickson, G. M., Substorm Theories: United They Stand, Divided They Fall, in *U.S. National Report to the International Union of Geodesy and Geophysics 1991–1994*, *Rev. Geophys., Supplement*, pp. 685–692, 1995.
- Hau, L.-N., and G. M. Erickson, Penetration of the Interplanetary Magnetic Field B_y Into Earth’s Plasma Sheet, *J. Geophys. Res.*, *100*, 21,745, 1995.
- Maynard, N. C., W. J. Burke, E. M. Basinska, G. M. Erickson, W. J. Hughes, D. A. Hardy, H. J. Singer, A. Yahnin, and F. S. Mozer, Dynamics of the Inner Magnetosphere Near Times of Substorm Onsets, *J. Geophys. Res.*, *101*, 7705, 1996.
- Maynard, N. C., W. J. Burke, G. M. Erickson, M. Nakamura, T. Mukai, S. Kokubun, T. Yamamoto, B. Jacobsen, A. Egelane, J. C. Samson, D. R. Weimer, G. D. Reeves, and H. Lühr, GEOTAIL Measurements Compared With the Motions of High-Latitude Auroral Boundaries During Two Substorms, *J. Geophys. Res.*, *102*, 9553, 1997.
- Burke, W. J., N. C. Maynard, G. M. Erickson, M. Nakamura, S. Kokubun, B. Jacobsen, and R. W. Smith, High-Latitude Auroral Boundaries Compared With GEOTAIL Measurements During Two Substorms, in *Geospace Mass and Energy Flow: Results From the International Solar-Terrestrial Physics Program*, *Geophys. Monogr. Ser.*, vol. 104, pp. 129–141, American Geophysical Union, Washington, D.C., 1998.
- Maynard, N. C., G. M. Erickson, W. J. Burke, A. G. Yahnin, J. C. Samson, G. D. Reeves, M. Nakamura, and V. V. Klimenko, Substorms and the Inner Magnetosphere: Onset and Initial Expansion, in *Polar Cap Boundary Phenomena*, ed. By J. Moen, A. Egeland, and M. Lockwood, pp. 381–392, NATO Advanced Studies Series, Kluwer Academic Publishers, Dordrecht, 1998.
- White, W. W., G. L. Siscoe, G. M. Erickson, Z. Kaymaz, N. C. Maynard, K. D. Siebert, B. U. Ö. Sonnerup, and D. R. Weimer, The Magnetospheric Sash and the Cross-Tail S, *Geophys. Res. Lett.*, *25*, 1605, 1998.
- Siscoe, G. L., N. U. Crooker, G. M. Erickson, B. U. Ö. Sonnerup, K. D. Siebert, D. R. Weimer, W. W. White, N. C. Maynard, Global Geometry of Magnetospheric Currents Inferred From MHD Simulations, in *Magnetospheric Current Systems*, *Geophys. Mongr. Ser.*, vol. 118, edited by S.-I. Ohtani, pp. 41–52, AGU, Washington, D.C., 2000.
- Siscoe, G. L., G. M. Erickson, B. U. Ö. Sonnerup, N. C. Maynard, K. D. Siebert, D. R. Weimer, and W. W. White, Deflected Magnetosheath Flow at the High-Latitude Magnetopause, *J. Geophys. Res.*, *105*, 12,851, 2000.
- Erickson, G. M., N. C. Maynard, W. J. Burke, G. R. Wilson, and M. A. Heinemann, Electromagnetics of Substorm Onsets in the Near-Geosynchronous Plasma Sheet, *J. Geophys. Res.*, *105*, 25,265, 2000.
- Maynard, N. C., S. Savin, G. M. Erickson, H. Kawano, Z. Nemecek, W. K. Peterson, J. Safranokowa, I. Sandahl, J. D. Scudder, G. L. Siscoe, B. U. Ö. Sonnerup, D. R. Weimer, W. W. White, and G. R. Wilson, Observations of the Magnetospheric “Sash” and Its Implications Relative to Solar-Wind/Magnetosphere Coupling: A Multisatellite Event Analysis, *J. Geophys. Res.*, *106*, 6097, 2001.
- Maynard, N. C., G. L. Siscoe, B. U. Ö. Sonnerup, W. W. White, K. D. Siebert, D. R. Weimer, G. M. Erickson, J. A. Schoendorf, D. M. Ober, and G. R. Wilson, The Response of Ionospheric Convection to Changes in the IMF: Lessons From a MHD Simulation, *J. Geophys. Res.*, *106*, 21,429, 2001.
- Siscoe, G. L., G. M. Erickson, B. U. Ö. Sonnerup, N. C. Maynard, K. D. Siebert, D. R. Weimer, and W. W. White, Relation Between Cusp and Mantle in MHD Simulations, *J. Geophys. Res.*, *106*, 10,743–10,750, 2001.
- Siscoe, G. L., G. M. Erickson, B. U. Ö. Sonnerup, N. C. Maynard, K. D. Siebert, D. R. Weimer, and W. W. White, Global Role of $E_{\parallel}$ in Magnetopause Reconnection, *J. Geophys. Res.*, *106*, 13,015–13,022, 2001.

- Siscoe, G. L., G. M. Erickson, B. U. Ö. Sonnerup, N. C. Maynard, K. D. Siebert, D. R. Weimer, and W. W. White, Magnetospheric Sash Dependence on IMF Direction, *Geophys. Res. Lett.*, *28*, 1921–1924, 2001.
- Sonnerup, B. U. Ö., K. D. Siebert, W. W. White, D. R. Weimer, N. C. Maynard, J. A. Schoendorf, G. R. Wilson, G. L. Siscoe, and G. M. Erickson, Simulations of the Magnetosphere for Zero IMF: The Groundstate, *J. Geophys. Res.*, *106*, 29,419, 2001.
- White, W. W., J. A. Schoendorf, K. D. Siebert, N. C. Maynard, D. R. Weimer, G. R. Wilson, B. U. Ö. Sonnerup, G. L. Siscoe, and G. M. Erickson, MHD Simulation of Magnetospheric Transport at the Mesoscale, in *Space Weather, Geophys. Monogr. Ser.*, vol. *125*, edited by P. Song, H. J. Singer, and G. L. Siscoe, pp. 229–240, American Geophysical Union, Washington, DC, 2001.
- Erickson, G. M., G. L. Siscoe, D. R. Weimer, K. D. Siebert, M. A. Heinemann, B. U. Ö. Sonnerup, N. C. Maynard, and W. W. White, Prediction of Alfvénic Turbulence Near the Magnetospheric Sash, *Planet. Space Sci.*, *50*, 627, 2002.
- Maynard, N. C., B. U. Ö. Sonnerup, G. L. Siscoe, D. R. Weimer, K. D. Siebert, G. M. Erickson, W. W. White, J. A. Schoendorf, D. M. Ober, and G. R. Wilson, and M. A. Heinemann, Predictions of Magnetosheath Merging Between IMF Field Lines of Opposite Polarity, *J. Geophys. Res.*, *107* (A12), 1456, doi: 10.1029/2002JA009289, 2002.
- Siscoe, G. L., N. C. Crooker, G. M. Erickson, B. U. Ö. Sonnerup, N. C. Maynard, J. A. Schoendorf, K. D. Siebert, D. R. Weimer, W. W. White, and G. R. Wilson, MHD Properties of Magnetosheath Flow, *Planet. Space Sci.*, *50*, 461, 2002.
- Siscoe, G. L., G. M. Erickson, B. U. Ö. Sonnerup, N. C. Maynard, J. A. Schoendorf, K. D. Siebert, D. R. Weimer, W. W. White, and G. R. Wilson, Hill Model of Transpolar Potential Saturation: Comparisons With MHD Simulations, *J. Geophys. Res.*, *107*(A6), 10.1029/2001JA000109, 2002.
- Siscoe, G. L., G. M. Erickson, B. U. Ö. Sonnerup, N. C. Maynard, J. A. Schoendorf, K. D. Siebert, D. R. Weimer, W. W. White, and G. R. Wilson, Flow-Through Magnetic Reconnection, *Geophys. Res. Lett.*, *29*(13), 1626, doi: 10.1029/2001GRL013536, 2002.
- Maynard, N. C., W. J. Burke, J. Moen, D. M. Ober, J. D. Scudder, J. B. Sigwarth, G. L. Siscoe, B. U. Ö. Sonnerup, W. W. White, K. D. Siebert, D. R. Weimer, G. M. Erickson, L. A. Frank, M. Lester, W. K. Peterson, C. T. Russell, G. R. Wilson, and A. Egeland, Responses of the Open-Closed Field Line Boundary in the Evening Sector to IMF Changes: A Source Mechanism for Sun-Aligned Arcs, *J. Geophys. Res.*, *108*(A1), 1006, doi: 10.1029/2001JA000174, 2003.
- Maynard, N. C., W. J. Burke, J. D. Scudder, D. M. Ober, G. L. Siscoe, W. W. White, K. D. Siebert, D. R. Weimer, G. M. Erickson, J. Schoendorf, and M. A. Heinemann, Observation and Simulation of Depletion Layers With Southward IMF, *Ann. Geophys.*, *22*, 2151, 2004.
- Wolf, R. A., V. Kumar, F. R. Toffoletto, G. M. Erickson, A. M. Savoie, C. X. Chen, and C. L. Lemon, Estimating Local Plasma Sheet $PV^{5/3}$ from Single-Spacecraft Measurements, *J. Geophys. Res.*, Submitted, 2006.

Other Publications:

- Erickson, G. M., and M. Heinemann, A Mechanism for Magnetospheric Substorms, in *Substorms 1*, pp. 587–592, ESA SP-335, May 1992.
- Erickson, G. M., Substorm Theories: Are They Converging, in *Strategies for the Tail and Substorm Campaign*, edited by W. J. Hughes, pp. 45–64, Boston University Center for Space Physics, Boston, 1993.
- Erickson, G. M., and M. Heinemann, The Stability of Sunward Convection: A Triggering and Operative Mechanism for Substorms, prepared for the *GEM Workshop on the Tail and Substorms*, Snowmass, 1994.
- Erickson, G. M., and M. Heinemann, A Mechanism for the Onset of Magnetospheric Substorms, in *Substorms 2*, edited by J. R. Kan, J. D. Craven, and S.-I. Akasofu, pp. 333–339, University of Alaska Geophysical Institute, Fairbanks, 1994.
- Erickson, G. M., W. J. Burke, M. Heinemann, J. C. Samson, and N. C. Maynard, Towards a Complete Conceptual Model of Substorm Onsets and Expansions, in *Substorms 3*, pp. 423–428, ESA SP-389, October 1996.
- Maynard, N. C., W. J. Burke, G. M. Erickson, E. M. Basinska, and A. G. Yahnin, Magnetosphere-Ionosphere Coupling During Substorm Onset, in *Substorms 3*, pp. 301–305, ESA SP-389, October 1996.

- Hill, T. H., F. R. Toffoletto, G. M. Erickson, and M. A. Heinemann, Final report on the contract “GGCM: A Modular-Progressive Approach” from NSF to Rice University, 1998.
- Maynard, N. C., G. M. Erickson, W. J. Burke, and G. R. Wilson, Magnetospheric Electric Fields During Substorm Onset and Expansion Phases, in *Substorms 4*, ed. S. Kokubun and Y. Kamide, pp. 605–610, Kluwer Academic Publ., 1998.
- Burke, W. J., and G. M. Erickson, Bursty Bulk Flows: Some Electrodynamical Considerations, in *Substorms 5*, pp. 153–156, ESA SP-443, July 2000.
- Erickson, G. M., N. C. Maynard, G. R. Wilson, and W. J. Burke, Electromagnetics of Substorm Onsets in the Near-Geosynchronous Plasma Sheet, *Substorms 5*, pp. 385–388, ESA SP-443, July 2000.
- Siebert, K. D., W. W. White, J. A. Shoendorf, D. R. Weimer, N. C. Maynard, G. R. Wilson, B. U. Ö. Sonnerup, G. L. Siscoe, and G. M. Erickson, Test Report: Integrated Space Weather Prediction Model (ISM) Simulation of the Magnetic Cloud Event of October 1995, Technical Report MRC/NSH-R-00-005 to the Defense Threat Reduction Agency, September 28, 2000.
- Siebert, K. D., W. W. White, J. A. Shoendorf, D. R. Weimer, N. C. Maynard, G. R. Wilson, B. U. Ö. Sonnerup, G. L. Siscoe, and G. M. Erickson, Test Report: Integrated Space Weather Prediction Model (ISM) Simulation of Average Shock Event of November 1997, Technical Report MRC/NSH-R-00-006 to the Defense Threat Reduction Agency, September 28, 2000.
- Erickson, G. M., N. C. Maynard, and G. R. Wilson, Observations of Two-Stage Substorm Onsets in the Near-Earth Plasma Sheet, in *Substorms 6*, ed. R. M. Winglee, pp. 370–375, University of Washington, Seattle, 2002.

Presentations at Scientific Meetings:

- Erickson, G. M., R. A. Wolf, and G.-H. Voigt, Is Steady Convection Possible in the Earth’s magnetotail?, AGU Fall Meeting, San Francisco, 8–12 December 1980. [*EOS Trans. AGU*, 61, no. 46 supplement, 1071, 1980]
- Erickson, G. M., On the Cause of X-line Formation in the Near-Earth Plasma Sheet: Results of Adiabatic Convection of Plasma-Sheet Plasma, AGU Chapman Conference on Magnetic Reconnection, Los Alamos, 3–7 October 1983.
- Erickson, G. M., Quasi-Static Convection of Plasma-Sheet Flux Tubes Using Self-Consistent Magnetospheric-Magnetic-Field Models in Two Dimensions, AGU Fall Meeting, San Francisco, 5–10 December 1983. [*EOS Trans. AGU*, 64, no. 45 supplement, 809, 1983]
- Erickson, G. M., Modeling of Adiabatic Convection in the Earth’s Plasma Sheet: Implications for Magnetospheric Substorms (Poster), The Second International School for Space Simulations, Kapaa, Kauai, Hawaii, 4–15 February 1985.
- Erickson, G. M., Modeling of Plasma-Sheet Convection: Implications for Substorms, Chapman Conference on Magnetotail Physics, Laurel, Md, 28–31 October 1985.
- Erickson, G. M., Modeling of Plasma-Sheet Convection: Implications for Substorms (Poster), AGU Spring Meeting, Baltimore, 19–22 May 1986. [*EOS Trans. AGU*, 67, no. 16 supplement, 350, 1986]
- Voigt, G.-H., R. W. Spiro, and G. M. Erickson, A Mechanism to Explain the Semi-Annual Variation of Geomagnetic Activity, AGU Spring Meeting, Baltimore, 19–22 May 1986. [*EOS Trans. AGU*, 67, no. 16 supplement, 351, 1986]
- Erickson, G. M., Effects of Magnetopause Motion on Inner-Plasma-Sheet Magnetic Structure During Earthward Convection (Poster), AGU Spring Meeting, Baltimore, 18–22 May 1987. [*EOS Trans. AGU*, 68, no. 16 supplement, 386, 1987]
- Erickson, G. M., and M. Heinemann, Physical Stability Limit on Sunward-Convection Models, AGU Fall Meeting, San Francisco, 5–9 December 1988. [*EOS Trans. AGU*, 69, no. 44 supplement, 1393, 1988]
- Erickson, G. M., and R. A. Wolf, On the Existence of Steady-State Convection in the Magnetotail and the Physics of the Harang Discontinuity (Poster), AGU Spring Meeting, Baltimore, 7–12 May 1989. [*EOS Trans. AGU*, 70, no. 15 supplement, 435, 1989]
- Erickson, G. M., Global MHD Stability of the Magnetosphere During Earthward Plasma-Sheet Convection, Rice Theoretical Workshop on Space Plasma Physics, Houston, 25–26 May 1989.

- Wolf, R. A., R. W. Spiro and G. M. Erickson, The Physics of the Harang Discontinuity and Its Relationship to Plasma Pressure in the Inner Plasma Sheet (R. A. Wolf), IAGA 6th Scientific Assembly, Exeter, England, 24 July–4 August 1989.
- Erickson, G. M., and R. A. Wolf, The Physics of the Harang Discontinuity, AGU Fall Meeting, San Francisco, 4–8 December 1989. [*EOS Trans. AGU*, 70, no. 43 supplement, 1295, 1989]
- Erickson, G. M., On the Determination of the Polytopic Index in the Plasma Sheet, AGU Spring Meeting, Baltimore, 29 May–1 June 1990. [*EOS Trans. AGU*, 71, no. 17 supplement, 606, 1990]
- Erickson, G. M., Magnetospheric-Ionospheric Coupling and the Pressure-Balance Inconsistency, AGU Fall Meeting, San Francisco, 3–7 December 1990. [*EOS Trans. AGU*, 71, no. 43 supplement, 1545, 1990]
- Erickson, G. M., Tail Convection and Force Balance, Goddard Research Workshop on Physics of the Global Magnetosphere, “Convection in the Magnetotail,” Goddard Space Flight Center, Md, 22–24 May 1991.
- Erickson, G. M., and M. Heinemann, MHD Stability of a Finite-Width, Two-Dimensional Magnetosphere, AGU Spring Meeting, Baltimore, 28–31 May 1991. [*EOS Trans. AGU*, 72, no. 17 supplement, 243, 1991]
- Erickson, G. M., Field-aligned Currents and the Physics of the Harang Discontinuity (**Invited**), IUGA Symposium 3.3, Vienna, 16 August 1991. [IAGA Abstracts, GAM 3.3, 371, 1991]
- Erickson, G. M., Nightside Auroral-Zone Structure, AGU Fall Meeting, San Francisco, 9–13 December 1991. [*EOS Trans. AGU*, 72, no. 44 supplement, 415, 1991]
- Erickson, G. M., and M. Heinemann, A Mechanism for Magnetospheric Substorms, International Conference on Substorms, Kiruna, Sweden, 23–27 March 1992.
- Erickson, G. M., and M. Heinemann, A Mechanism for Magnetospheric Substorms, AGU Spring Meeting, Montreal, Canada, 11–15 May 1992. [*EOS Trans. AGU*, 73, no. 14 supplement, 270, 1992]
- Erickson, G. M., R. W. Spiro, and R. A. Wolf, The Harang Discontinuity and Magnetospheric Forecasting (Poster, R. W. Spiro), Solar-Terrestrial Predictions Workshop, Ottawa, Canada, 18–22 May 1992.
- Erickson, G. M., and M. Heinemann, A Mechanism for Magnetospheric Substorms, 2, AGU Fall Meeting, 7–11 December 1992. [*EOS Trans. AGU*, 73, no. 43 supplement, 470, 1992]
- Hau, L.-N., and G. M. Erickson, The Effect of a Magnetic By Component on Plasma Sheet Convection, AGU Fall Meeting, 7–11 December 1992. [*EOS Trans. AGU*, 73, no. 43 supplement, 470, 1992]
- Heinemann, M., and G. M. Erickson, Physics of Inertial Currents and Parallel Electric Fields (M. Heinemann), AGU Fall Meeting, 7–11 December 1992. [*EOS Trans. AGU*, 73, no. 43 supplement, 457, 1992]
- Burke, W. J., J. S. Machuzak, N. C. Maynard, E. M. Basinska, G. M. Erickson, R. A. Hoffman, and J. A. Slavin, Electrodynamic Signatures of the Plasma Sheet Boundary Layer in the High-Latitude Ionosphere (N. C. Maynard), AGU Spring Meeting, Baltimore, 24–28 May 1993.
- Erickson, G. M., Field-Aligned Current Structure Within the Harang Discontinuity Sector, AGU Spring Meeting, Baltimore, 24–28 May 1993. [*EOS Trans. AGU*, 74, no. 16 supplement, 260, 1993]
- Jorgensen, A. M., T. A. Fritz, and G. M. Erickson (added), Dynamics of a Plasmoid Formed During the May 13th, 1985 AMPTE Barium Release (Poster, A. M. Jorgensen), AGU Spring Meeting, Baltimore, 24–28 May 1993. [*EOS Trans. AGU*, 74, no. 16 supplement, 278, 1993]
- Erickson, G. M., Substorm Theories: Are They Converging?, GEM Workshop on the Physics of the Tail and Substorms (**Invited**), Snowmass, Colorado, 1 July 1993.
- Erickson, G. M., and S. Stahara, Coupled Magnetosheath-Magnetosphere Model, GEM Working Group 5 Meeting, Boston College, 26–27 October, 1993.
- Hau, L.-N., and G. M. Erickson, Penetrations of the IMF B_y Into Earth’s Plasma Sheet (Poster, G. M. Erickson), AGU Fall Meeting, San Francisco, 6–10 December, 1993. [*EOS Trans. AGU*, 74, no. 43 supplement, 519, 1993]
- Heinemann, M. A., and G. M. Erickson, Field-Aligned Current Generation in the Plasma Sheet Boundary Layer, AGU Fall Meeting, 6–10 December 1993. [*EOS Trans. AGU*, 74, no. 43 supplement, 508, 1993]
- Jorgensen, A. M., T. A. Fritz, and G. M. Erickson, Dynamics of a Plasmoid Formed During the May 13th, 1985 AMPTE Barium Release (Poster, A. M. Jorgensen), AGU Fall Meeting, San Francisco, 6–10 December, 1993. [*EOS Trans. AGU*, 74, no. 43 supplement, 519, 1993]
- Erickson, G. M., and M. Heinemann, A Mechanism for Magnetospheric Substorms, International Conference on Substorms–2, University of Alaska at Fairbanks, 7–11 March, 1994.
- Heinemann, M., D. H. Pontius, Jr., and G. M. Erickson, Parallel Electric Fields in Isotropic Plasma, AGU Spring Meeting, 23–27 May, 1994.

- Erickson, G. M., Extending the MSFM to Low-Latitude/Ground, GEM GGCM/WG1, Snowmass, 29 June, 1994.
- Erickson, G. M., Putting the Substorm Into the Modularized GGCM, GEM GGCM/WG3, Snowmass, 29 June, 1994.
- Erickson, G. M., Limitations of Ideal MHD, GEM Tail-Substorm/WG2, Snowmass, 30–31 June, 1994.
- Erickson, G. M., and M. Heinemann, The Stability of Sunward Convection: An Operative and Triggering Mechanism for Substorms (Poster), GEM Tail-Substorm, Snowmass, 30–31 June, 1994.
- Maynard, N. C., G. M. Erickson, E. M. Basinska, W. J. Hughes, H. J. Singer, A. Yahnin, and F. S. Mozer, Substorm Onsets at the Inner Edge of the Plasma Sheet, AGU Spring Meeting, Baltimore, 1995. [*EOS Trans. AGU*, 76, no. 17 supplement, 261, 1995] [*EOS Trans. AGU*, 75, no. 16 supplement, 320, 1994]
- Maynard, N. C., W. J. Burke, D. A. Hardy, E. M. Basinska, G. M. Erickson, W. J. Hughes, H. J. Singer, A. Yahnin, and F. S. Mozer, Dynamics of the Inner Magnetosphere Near Times of Substorm Onsets, GEM Tail-Substorm, Snowmass, 26–30 June 1995.
- Maynard, N. C., W. J. Burke, D. A. Hardy, E. M. Basinska, G. M. Erickson, W. J. Hughes, H. J. Singer, A. Yahnin, and F. S. Mozer (N. C. Maynard), Dynamics of the Inner Magnetosphere Near Times of Substorm Onsets, IAGA, Boulder, CO, July 1995.
- Erickson, G. M., J. C. Samson, N. C. Maynard, and M. Heinemann, The Role of Cavity Modes in Global Magnetospheric Stability, AGU Fall Meeting, 11–15 December 1995. [*EOS Trans. AGU*, 76, no. 46 supplement, 522, 1995]
- Maynard, N. C., W. J. Burke, F. J. Rich, M. Nakamura, V. Angelopolous, B. Jacobsen, A. Egeland, H. Lühr, A. Nishida, T. Yamamoto, K. Tsuruda, S. Kokubun, J. Samson, G. Erickson, and D. R. Weimer, Dynamics of the High Latitude Boundary of the Nightside Aurora: A Comparison of GEOTAIL and Ground Based Observations (N. C. Maynard), AGU Fall Meeting, San Francisco, 1995. [*EOS Trans. AGU*, 76, no. 46 supplement, 467, 1995]
- Lambour, R., and G. M. Erickson, Testing the MSFM at Low Altitude, GEM GGCM Campaign/SEC Space Weather Workshop, Boulder, 11–13 January 1996.
- Erickson, G. M., W. J. Burke, M. Heinemann, J. C. Samson, and N. C. Maynard, Towards a Complete Conceptual Model of Substorm Onsets and Expansions (Poster), Third International Conference on Substorms, Versailles, France, 13–17 May 1996.
- Maynard, N. C., W. J. Burke, G. M. Erickson, E. M. Basinska, and A. G. Yahnin, Magnetosphere-Ionosphere Coupling During Substorm Onset (N. C. Maynard), Third International Conference on Substorms, Versailles, France, 13–17 May 1996.
- Erickson, G. M., and M. Heinemann, A Next-Generation, Physically-Based, Magnetospheric Convection Model (Poster), GEM GGCM, Snowmass, 24–28 June 1996.
- Erickson, G. M., W. J. Burke, M. Heinemann, J. C. Samson, and N. C. Maynard, The Role of M-I Coupling in Substorm Onsets (Poster), GEM Tail/Substorm, Snowmass, 24–28 June 1996.
- Burke, W. J., N. C. Maynard, G. M. Erickson, M. Nakamura, and S. Kokubun, High-Latitude Auroral Boundaries Compared With GEOTAIL Measurements During Two Substorms (W. J. Burke), Huntsville 1996 Workshop: Encounter Between Global Observations and Models in the ISTP Era, September 15–20, 1996.
- Heinemann, M., and G. M. Erickson, Mathematical Model of Field-Aligned Currents and Parallel Potential Drops in the Plasma Sheet Boundary Layer, AGU Fall Meeting, San Francisco, 15–19 December 1996. [*EOS Trans. AGU*, 77, no. 46 supplement, 627, 1996]
- Erickson, G. M., W. J. Burke, M. Heinemann, and N. C. Maynard, CRRES Observational Constraints for Substorm Onset (Abstract), AGU Fall Meeting, San Francisco, 15–19 December 1996. [*EOS Trans. AGU*, 77, no. 46 supplement, 610, 1996]
- Maynard, N. C., G. M. Erickson, W. J. Burke, A. Yahnin, J. Samson, G. Reeves, and M. Nakamura, Substorms and the Inner Magnetosphere: Onset and Initial Expansion (N. C. Maynard, **Invited**), NATO Advanced Science Institute on Polar Cap Phenomena, Longyearbyen, Norway, 4–13 June 1997.
- Erickson, G. M., N. C. Maynard, and W. J. Burke, Substorm Onset in the Near-Earth Plasma Sheet (Poster), GEM Tail/Substorm, Snowmass, 16–20 June 1997.
- Erickson, G. M., N. C. Maynard, W. J. Burke, A. Yahnin, J. Samson, G. Reeves, and M. Nakamura, Substorms and the Inner Magnetosphere: Onset and Initial Expansion, GEM Tail/Substorm, Snowmass, 16–20 June 1997.

- Erickson, G. M., The Case for a Regional-Modular GGCM, GEM GGCM, Snowmass, 16–20 June 1997.
- Erickson, G. M., N. C. Maynard, and W. J. Burke, Electromagnetics of Substorm Onsets Observed at CRRES (Abstract), AGU Fall Meeting, San Francisco, 8–12 December 1997.
- Siscoe, G. L., G. M. Erickson, N. C. Maynard, K. D. Siebert, B. U. Ö. Sonnerup, D. R. Weimer, and W. W. White, The Magnetospheric Sash: A Newly Recognized Global Merging Feature (**Invited**), AGU Fall Meeting, San Francisco, 8–12 December 1997.
- Maynard, N. C., W. J. Burke, and G. M. Erickson, Magnetospheric Electric Fields During Substorm Onset and Expansion Phases, International Conference on Substorms-4, Lake Hamana, Japan, 9–13 March 1998.
- Heinemann, M., and G. M. Erickson, Field-Aligned Currents and Parallel Electric Fields in the Plasma Sheet Boundary Layer, European Geophysical Society 23rd General Assembly, Nice, France, 20–24 April 1998.
- Erickson, G. M., N. C. Maynard, G. R. Wilson, and W. J. Burke, Electromagnetics of Substorm Onsets Observed in the Inner Magnetosphere by CRRES, AGU Spring Meeting, Boston, 26–29 May 1998. [*EOS Trans. AGU*, 79, no. 17 supplement, 329, 1998] ö Siscoe, G. L., W. W. White, B. U. Ö. Sonnerup, K. D. Siebert, D. R. Weimer, N. C. Maynard, and G. M. Erickson, Solar Wind Access to the Magnetosphere: Global MHD Findings, AGU Spring Meeting, Boston, 26–29 May 1998. [*EOS Trans. AGU*, 79, no. 17 supplement, 303, 1998]
- Erickson, G. M., N. C. Maynard, W. J. Burke, and G. R. Wilson, Electromagnetics of Substorm Onsets Observed at CRRES, NSF GEM Tail/Substorm, Snowmass, 15–19 June 1998.
- Heinemann, M., and G. M. Erickson, Effects of FLR Physics on Tail Structure and M-I Coupling, NSF GEM Tail/Substorm, Snowmass, 15–19 June 1998.
- White, W. W., K. D. Siebert, D. R. Weimer, G. L. Siscoe, B. U. Sonnerup, N. C. Maynard, and G. M. Erickson, Ionospheric Outflows in Global Ionosphere-Thermosphere-Magnetosphere Simulations (**Invited**), Fall AGU Meeting, San Francisco, 6–10 December 1998. [*EOS Trans. AGU*, 79, no. 45 supplement, 765, 1998]
- Heinemann, M., and G. M. Erickson, Field-Aligned Currents and Electric Fields in the Plasma Sheet Boundary Layer, Chapman Conference on Magnetospheric Current Systems, Kona, Hawaii, 11–15 January 1999.
- Siscoe, G. L., G. M. Erickson, B. U. Ö. Sonnerup, K. D. Siebert, W. W. White, N. C. Maynard, and D. R. Weimer, Global Configuration of Magnetospheric Current Systems, Chapman Conference on Magnetospheric Current Systems, Kona, Hawaii, 11–15 January 1999.
- Huang, C. Y., and G. M. Erickson, Solar Wind-Magnetosphere-Ionosphere Coupling, AFOSR Space Science Spring Review, Hanscom AFB, 16–18 March 1999.
- Erickson, G. M., B. U. Ö. Sonnerup, G. L. Siscoe, W. W. White, K. D. Siebert, N. C. Maynard, D. R. Weimer, J. A. Schoendorf, and G. R. Wilson, Magnetopause Current Systems and Transport for Zero IMF, AGU Spring Meeting, Boston, 31 May – 4 June 1999.
- Heinemann, M. A. and G. M. Erickson, Loads and Generators in Magnetospheric Plasma, AGU Spring Meeting, Boston, 31 May – 4 June 1999.
- Siebert, K. D., G. M. Erickson, B. U. Ö. Sonnerup, G. L. Siscoe, W. W. White, N. C. Maynard, D. R. Weimer, J. A. Schoendorf, and G. R. Wilson, Global Configuration of Magnetospheric Current Systems, AGU Spring Meeting, Boston, 31 May – 4 June 1999.
- Siscoe, G. L., G. M. Erickson, B. U. Ö. Sonnerup, W. W. White, K. D. Siebert, N. C. Maynard, D. R. Weimer, J. A. Schoendorf, and G. R. Wilson, Strongly Deflected Magnetosheath Flow at the High-Latitude Magnetopause: The Force behind the Svalgaard-Mansurov Effect, AGU Spring Meeting, Boston, 31 May – 4 June 1999. [SM42A-11]
- Erickson, G. M., N. C. Maynard, G. R. Wilson, W. J. Burke, and M. A. Heinemann, Electromagnetics of Substorm Onsets in the Near-Geosynchronous Plasma Sheet, NSF GEM Tail/Substorm, Snowmass, 21–25 June 1999.
- Sonnerup, B. U. Ö., G. M. Erickson, G. L. Siscoe, W. W. White, K. D. Siebert, N. C. Maynard, D. R. Weimer, J. A. Schoendorf, and G. R. Wilson, Magnetospheric Current Systems and Transport for Zero and Northward IMF Conditions, IUGG, Birmingham, England, July 1998.
- Erickson, G. M., N. C. Maynard, W. J. Burke, and G. R. Wilson, The Explosive Growth Phase: An Alfvén Wave Source, AGU Fall Meeting, San Francisco, December 13–17, 1999. [*EOS Trans. AGU*, 80, no. 46 supplement, 891, 1999]

- Siscoe, G. L., Z. Kaymaz, K. D. Siebert, N. C. Maynard, D. R. Weimer, W. W. White, B. U. Ö. Sonnerup, and G. M. Erickson, How the Mantle Displaces the Plasma Sheet When the IMF IS Northward, AGU Fall Meeting, San Francisco, 13–17 December 1999. [*EOS Trans. AGU*, 80, no. 46 supplement, 898, 1999]
- White, W. W., K. D. Siebert, G. L. Siscoe, D. R. Weimer, B. U. Ö. Sonnerup, and G. M. Erickson, Modes of Mesoscale Magnetospheric Dynamics: Dependence on IMF Orientation, 38th Aerospace Sciences Meeting, Reno, NV, 10–13 January 2000.
- White, W. W., J. A. Schoendorf, K. D. Siebert, N. C. Maynard, D. R. Weimer, G. R. Wilson, B. U. Ö. Sonnerup, G. L. Siscoe, and G. M. Erickson, MHD Simulation of MHD Transport at the Mesoscale, Chapman Conference on Space Weather, Clearwater, March 20-24, 2000.
- Erickson, G. M., Initiation of the Substorm Current Wedge (**Invited**), ICS5, St. Petersburg, Russia, May 16-20, 2000.
- Erickson, G. M., N. C. Maynard, G. R. Wilson, and W. J. Burke, Electromagnetics of Substorm Onsets in the Near-Geosynchronous Plasma, ICS-5, St. Petersburg, Russia, May 16-20, 2000.
- Burke, W. J., and G. M. Erickson, Bursty Bulk Flows: Some Electrodynamical Considerations, ICS5, May 16-20, 2000.
- Erickson, G. M., G. L. Siscoe, D. R. Weimer, K. D. Siebert, N. C. Maynard, and B. U. Ö. Sonnerup, Ion-Cyclotron, Mirror-Mode, and Firehose Turbulence Along the Magnetopause, AGU Spring Meeting, Washington D.C., May 30 - June 3, 2000. [*EOS Trans. AGU*, 81, no. 19 supplement, 373, 2000]
- Maynard, N. C., G. L. Siscoe, W. J. Burke, D. R. Weimer, K. D. Siebert, G. M. Erickson, B. U. Ö. Sonnerup, W. W. White, J. A. Schoendorf, D. M. Ober, and G. R. Wilson, The Response of Ionospheric Convection to Changes in the IMF: 1. Lessons From A MHD Simulation, AGU Spring Meeting, Washington D.C., May 30 - June 3, 2000. [*EOS Trans. AGU*, 81, no. 19 supplement, 405, 2000]
- Siscoe, G. L., Erickson, G. M., D. R. Weimer, K. D. Siebert, N. C. Maynard, and B. U. Ö. Sonnerup, Ion-Cyclotron, Mirror-Mode, and Firehose Turbulence Along the Magnetopause, NSF GEM/GGCM, Snowmass, 19-23 June 2000.
- Siebert, K. D., B. U. Ö. Sonnerup, W. W. White, D. R. Weimer, G. L. Siscoe, G. M. Erickson, J. A. Schoendorf, and G. R. Wilson, Magnetosphere for Zero IMF: The Ground State, NSF GEM/GGCM, 19-23 June 2000.
- Siscoe, G. L., G. M. Erickson, B. U. Ö. Sonnerup, N. C. Maynard, K. D. Siebert, D. R. Weimer, and W. W. White, Role of E Parallel in Magnetopause Reconnection, NSF GEM/GGCM, 19-23 June 2000.
- White, W. W., J. A. Schoendorf, K. D. Siebert, B. U. Ö. Sonnerup, G. L. Siscoe, N. C. Maynard, D. R. Weimer, G. M. Erickson, and G. R. Wilson, MHD Simulation of Magnetospheric Transport at the Mesoscale, NSF GEM/GGCM, 19-23 June 2000.
- Erickson, G. M., G. L. Siscoe, D. R. Weimer, K. D. Siebert, N. C. Maynard, and B. U. Ö. Sonnerup, Ion-Cyclotron, Mirror-Mode, and Firehose Turbulence Along the Magnetopause, Intercomparative Magnetosheath Studies, Side-Antalya, Turkey, 4–8 September 2000.
- Erickson, G. M., G. L. Siscoe, M. A. Heinemann, B. U. Ö. Sonnerup, N. C. Maynard, N. C., Siscoe, K. D. Siebert, and D. R. Weimer, Response of the Magnetosphere to IMF Northward Turnings, AGU Fall Meeting, San Francisco, 15–19 December 2000. [*EOS Trans. AGU*, 81, no. 48 supplement, 1049, 2000]
- Maynard, N. C., D. R. Weimer, G. R. Wilson, K. D. Siebert, J. A. Schoendorf, D. M. Ober, W. W. White, G. L. Siscoe, G. M. Erickson, W. J. Burke, and B. U. Ö. Sonnerup, The Response of the Coupled Magnetosphere-Ionosphere System to Changes in the IMF, AGU Fall Meeting, San Francisco, 15–19 December 2000. [*EOS Trans. AGU*, 81, no. 48 supplement, 1020, 2000]
- Siscoe, G. L., G. M. Erickson, B. U. Ö. Sonnerup, N. C. Maynard, K. D. Siebert, D. R. Weimer, and W. W. White, MHD Properties of Magnetosheath Flow, AGU Fall Meeting, San Francisco, 15–19 December 2000. [*EOS Trans. AGU*, 81, no. 48 supplement, 962, 2000]
- Burke, W. J. G. M. Erickson, and N. C. Maynard, On the Triggering of Substorms, EGS, Nice, France, 2001.
- Erickson, G. M. G. L. Siscoe, B. U. Ö. Sonnerup, N. C. Maynard, K. D. Siebert, D. R. Weimer, W. W. White, J. A. Schoendorf, and G. R. Wilson, Flow-Through Reconnection 1: The Northward Case, AGU Spring Meeting, Boston, 29 May – 2 June 2001. [*EOS Trans. AGU*, 82, no. 20 supplement, 346, 2001]

- Maynard, N. C., G. L. Siscoe, G. M. Erickson, B. U. Ö. Sonnerup, J. A. Schoendorf, K. D. Siebert, D. R. Weimer, W. W. White, and G. R. Wilson, Predictions of Merging of Interplanetary Magnetic Field Lines in the Magnetosheath, AGU Spring Meeting, Boston, 29 May – 2 June 2001. [*EOS Trans. AGU*, 82, no. 20 supplement, 375, 2001]
- Siebert, K. D., G. M. Erickson, N. C. Maynard, J. A. Schoendorf, G. L. Siscoe, B. U. Ö. Sonnerup, D. R. Weimer, W. W. White, and G. R. Wilson, Flow-Through Reconnection 2: The Southward Case, AGU Spring Meeting, Boston, 29 May – 2 June 2001. [*EOS Trans. AGU*, 82, no. 20 supplement, 347, 2001]
- Siscoe, G. L., G. M. Erickson, N. C. Maynard, J. A. Schoendorf, K. D. Siebert, B. U. Ö. Sonnerup, D. R. Weimer, W. W. White, and G. R. Wilson, (INVITED) Flow-Through Reconnection 3: The General Case, AGU Spring Meeting, Boston, 29 May – 2 June 2001. [*EOS Trans. AGU*, 82, no. 20 supplement, 347, 2001]
- Siscoe, G. L., G. M. Erickson, N. C. Maynard, J. A. Schoendorf, K. D. Siebert, B. U. Ö. Sonnerup, D. R. Weimer, W. W. White, and G. R. Wilson, The Magnetospheric Fluopause, AGU Spring Meeting, Boston, 29 May – 2 June 2001. [*EOS Trans. AGU*, 82, no. 20 supplement, 374, 2001]
- Erickson, G. M., CRESS Observations of Substorm Onsets in the Near-Geosynchronous Plasma Sheet, GEM/Tail Substorm, Snowmass, Co., June 21, 2001.
- Maynard, N. C., G. L. Siscoe, G. M. Erickson, B. U. Ö. Sonnerup, K. D. Siebert, D. R. Weimer, W. W. White, and G. R. Wilson, Predictions of Merging of Interplanetary Magnetic Field Lines in the Magnetosheath (Poster), GEM, Snowmass, Co., June 19, 2001.
- Siscoe, G. L., K. D. Siebert, N. U. Crooker, B. U. Ö. Sonnerup, D. R. Weimer, G. M. Erickson, N. C. Maynard, W. W. White, J. A. Schoendorf, and G. R. Wilson, Flow-Through Reconnection (Poster), GEM, Snowmass, Co., June 19, 2001.
- Siscoe, G. L., K. D. Siebert, G. M. Erickson, B. U. Ö. Sonnerup, N. C. Maynard, J. A. Schoendorf, D. R. Weimer, W. W. White, and G. R. Wilson, Tail Current Contribution to Dst During Major Storms, AGU Fall Meeting, San Francisco, 10–14 December 2001. [*EOS Trans. AGU*, 82(47), Fall Meet. Suppl., 1072, 2001]
- Erickson, G. M., N. C. Maynard, and G. R. Wilson, Signatures and Timing of Local Substorm Onsets in the Near-Earth Plasma Sheet, ICS-6, Seattle, 25–29 March 2002.
- Erickson, G. M., N. C. Maynard, and G. R. Wilson, Signatures and Timing of Substorms in the Near-Earth Plasma Sheet, AGU Spring Meeting, 28–31 May, 2002. [*EOS Trans. AGU*, 83(19), Spring Meet. Suppl., Abstract SM22A-16, 2002]
- Maynard, N. C., D. M. Ober, W. J. Burke, J. D. Scudder, F. S. Mozer, C. T. Russell, G. L. Siscoe, G. M. Erickson, B. U. Ö. Sonnerup, D. R. Weimer, K. D. Siebert, and W. W. White, Evidence for Depletion Layers at the Dayside Magnetopause for IMF Orientations with Southward Components, AGU Spring Meeting, 28–31 May, 2002. [*EOS Trans. AGU*, 83(19), Spring Meet. Suppl., Abstract SM32C-05, 2002]
- Erickson, G. M., Genesis of Substorms in the Near-Earth Plasma Sheet (**Invited**), 34th COSPAR Scientific Assembly, Houston, TX, 10–19 October, 2002. [COSPAR 2002, D3.8-PSW2, ID-NR: COSPAR02-A-00831]
- Erickson, G. M., N. C. Maynard, and G. R. Wilson, Is the Current Disruption Region the Genesis Region for the Substorm X-Line? AGU Fall Meeting, San Francisco, 6–10 December 2002. [*EOS Trans. AGU*, 83(47), Fall Meet. Suppl., Abstract SM52B-08, 2002]
- Ober, D. M., N. C. Maynard, G. L. Siscoe, W. J. Burke, J. D. Scudder, G. M. Erickson, K. D. Siebert, C. T. Russell, and H. J. Singer, Testing the Potential Saturation Predictions of the Hill Model Using Observations From the March 31, 2001 Storm, AGU Fall Meeting, San Francisco, 6–10 December 2002. [*EOS Trans. AGU*, 83(47), Fall Meet. Suppl., Abstract SM72B-0620, 2002]
- Siscoe, G., K. Siebert, N. Crooker, G. Erickson, and N. Maynard, Internal or External? What MHD Simulation Can Say about the Cause of Semiannual Variation in Geomagnetic Activity (**Invited**), AGU Fall Meeting, San Francisco, 6–10 December 2002. [*EOS Trans. AGU*, 83(47), Fall Meet. Suppl., Abstract SM22B-01, 2002]
- Erickson, G. M., Introduction to GEM/SMC Workshop (3 sessions), GEM/SMC Workshop, Snowmass, 23 June 2003.
- Erickson, G. M., Genesis of Substorms in the Near-Earth Plasma Sheet, GEM/TS Workshop, Snowmass, 24 June 2003.

- Huang, T., and G. M. Erickson, Optimum Cross-Section of the Current Flowing Through Magnetic Field Lines, AGU Fall Meeting, San Francisco, 5–9 December 2005. [*EOS Trans. AGU*, 86(52), Fall Meet. Suppl., Abstract SH51A-06, 2005]
- Toffoletto, F. R., S. Sazykin, R. A. Wolf, R. Spiro, T. W. Hill, G. M. Erickson, and C. L. Lemon, Modeling the Inner Magnetospheric Effects of Substorms Using the RCM-E, AGU Fall Meeting, San Francisco, 5–9 December 2005. [*EOS Trans. AGU*, 86(52), Fall Meet. Suppl., Abstract SM31A-0397, 2005]
- Erickson, G. M., A. Savoie, R. A. Wolf, and S. Sazykin, Flux-Tube Depletions During Substorms, ICS-8, Banff Centre, Canada, 27–31 March 2006.
- Erickson, G. M., A. M. Savoie, and R. A. Wolf, Flux-Tube Depletions During Substorms, GEM/IM/S Workshop, Snomass, 27 June 2006.

Seminars:

- On the Reason for Magnetospheric Substorms, Florida Atlantic University, Physics Department, December 1979.
- Modeling of Plasma-Sheet Convection: Implications for Substorms, Goddard Space Flight Center, Laboratory for Extraterrestrial Physics, 12 July 1985.
- The Reason for Magnetospheric Substorms, Air Force Geophysics Laboratory, Space Physics Division, 12 April 1989.
- The Implications of Convection in the Earth’s Plasma Sheet, Boston University, Center for Space Physics, 13 April 1989.
- Stability of the Earth’s Magnetosphere, Air Force Geophysics Laboratory, Space Physics Division, 19 April 1989.
- The Physics of the Harang Discontinuity, GL Magnetospheric Theory and Modeling Working Group, Air Force Geophysical Laboratory, 5 October 1989.
- Field-Aligned Currents and the Physics of the Harang Discontinuity, Boston University, Department of Astronomy and Center for Space Physics, 7 March 1991.
- Stability of Sunward Convection: New Ideas for the Substorm Mechanism, with M. Heinemann, Phillips Laboratory Magnetospheric Physics Group, 6 September 1991.
- Mechanism for Magnetospheric Substorms, Dartmouth University, Thayer School of Engineering, 21 April 1992.
- A Scenario for Magnetospheric Substorms: Waiting for the Theory to Catch Up, Rice University, Department of Space Physics and Astronomy, 24 April 1992.
- BPL/BPS, CPL/CPS, PSBL, Stochastic Acceleration, Inverted Vs, Region 1 and 2 Birkeland Currents, and the Physics of the Harang Discontinuity, Rice University, Department of Space Physics and Astronomy, 29 April 1992.
- The Physics of the Harang Discontinuity, Consequences of Dawnside Depletion, Phillips Laboratory, Space Physics Division, 29 March 1993.
- The Physics of the Harang Discontinuity, Consequences of Dawnside Depletion, Boston University, Center for Space Physics, 1 April 1993.
- Inertial Currents in Isotropic Plasma, Rice University, Department of Space Physics and Astronomy, 26 April 1994.
- A Mechanism for Magnetospheric Substorms, Rice University, Department of Space Physics and Astronomy, 27 April 1994.
- What Triggers Magnetospheric Substorms?, Rice University, Department of Space Physics and Astronomy, 18 April 1995.
- The Substorm Puzzle, Rice University, Department of Space Physics and Astronomy, 9 November, 1995.
- Heinemann, M., and G. M. Erickson, Field-Aligned Currents and Parallel Electric Fields in the Plasma Sheet Boundary Layer, Boston University Center for Space Physics, 26 March 1998.
- Heinemann, M., and G. M. Erickson, Field-Aligned Currents and Parallel Electric Fields in the Plasma Sheet Boundary Layer, Air Force Research Laboratory/VSBS, 22 October 1998.

White, W. W., N. C. Maynard, K. D. Siebert, D. R. Weimer, G. R. Wilson, G. L. Siscoe, G. M. Erickson, B. U. Ö. Sonnerup, J. W. Freeman Jr., and R. A. Wolf, Toward a Global Model of the Coupled Magnetosphere-Ionosphere-Thermosphere System, Dartmouth College, Department of Physics and Astronomy, 24 November 1998.

Substorm Onsets Observed at CRRES, Air Force Research Laboratory, Hanscom AFB, 24 August 2000.

Substorm Onsets Observed at CRRES, Rice University, Department of Physics, 22 March 2001.