

Scientific Publications

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February 18, 2025

Manuscripts in preparation

- A. Brenner, T. I. Pulkkinen, and M. W. Liemohn, Solar wind - magnetosphere coupling under interim steady conditions, *J. Geophys. Res.*, submitted, 2025.

Peer-Reviewed Scientific Publications

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259. S. Kumar, T. I. Pulkkinen, and T. Pitkanen, Ion Moment Variability Across Substorm Phases: Statistical Insights, *J. Geophys. Res.*, in press, 2025.
258. S. Kumar, T. I. Pulkkinen, Statistical Analysis of Magnetopause Response During Substorm Phases, *Ann. Geophys.*, 43, 137–149, 2025, <https://doi.org/10.5194/angeo-43-137-2025>

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2. R. J. Pellinen, H. J. Opgenoorth, and T. I. Pulkkinen, Substorm recovery phase: Relationship to next activation, In: *Substorms 1*, ESA-SP 335, Noordwijk, The Netherlands, 1992 p. 469-475.
1. D. N. Baker and T. I. Pulkkinen, Realistic magnetic field line mapping throughout the Earth's magnetosphere during auroral substorms, In: *Research and Technology 1991 R&T report*, NASA Goddard Space Flight Center, Greenbelt, MD, 1992, p. 63-65.

Invited presentations

2023

106. Tuija Pulkkinen, Systems science needs global models, GEM annual meeting, San Diego, CA, June 2023. Invited oral presentation.
105. Tuija Pulkkinen, Space weather modeling from global to kinetic scales, Space Weather Week, Boulder, CO, April 2023. Invited oral presentation.
104. Minna Palmroth, Tuija I. Pulkkinen, Urs Ganse, Yann Pfau-Kempf, Tuomas Koskela, Ivan Zaitsev, Markku Alho, Giulia Cozzani, Lucile Turc, Markus Battarbee, Maxime Dubart, Harriet George, Evgeniy Gordeev, Maxime Grandin, Konstantinos Horaites, Adnane Osmane, Konstantinos Papadakis, Jonas Suni, Vertti Tervus, Hongyang Zhou and Rumi Nakamura, Magnetotail plasmoid eruption: Interplay of instabilities and reconnection, EGU General Assembly, Vienna, Austria, May 2023. Invited oral presentation.
103. Tuija Pulkkinen, Shannon Hill, Austin Brenner, Qusai Al Shidi, Gabor Toth, How does the Ionosphere Drive the Magnetospheric Processes?, EGU General Assembly, Vienna, Austria, April 2023. Invited oral presentation.
102. Tuija Pulkkinen, Drivers and impacts of substorms, sawtooth events and storms: Observations and global simulations, Seminar at Laboratory for Atmospheric and Space Physics, University of Colorado, Boulder, October, 2023. Invited oral presentation.

2021

101. Tuija I. Pulkkinen and Minna Palmroth, Space Weather Future Path Mingles Between Real and Virtual Worlds, AGU Fall Meeting, New Orleans, December 2021. Invited oral presentation.
100. Tuija I. Pulkkinen and Austin Brenner, Global simulation perspective to energy transport in the SW-M-I system, AGU Fall Meeting, New Orleans, December 2021. invited oral presentation.
99. Tuija I. Pulkkinen, The NextGen Magnetosphere, Helio2050 workshop, virtual meeting, May 2021. Invited oral presentation.
98. Tuija Pulkkinen, Austin Brenner, Qusai Al Shidi, Geomagnetic storms through the eyes of a global MHD simulation, SWM interactions workshop, virtual meeting, September 2021. Invited oral presentation.
97. Tamas I. Gombosi, Y. Chen, D. Fouhey, N. Ganushkina, A. O. Hero, W. B. Manchester, T. Pulkkinen, I. Sokolov, G. Toth, and S. Zou, Physics-based SWx Modeling with Machine Learning, 101st American Meteorological Society Annual Meeting, virtual meeting, January 2021. Invited oral presentation.

2020

96. Tuija Pulkkinen and Christopher Ruf, The coming of global storms: The critical impact and future of weather forecasting, University of Michigan College of Engineering alumni seminar, Virtual, May 2020. Invited oral presentation.

2019

95. Andrew P Dimmock, Christopher T Russell, Roald Sagdeev, Vladimir Krasnoselskikh, Simon N Walker, Chris Carr, Iannis S Dandouras, C Philippe Escoubet, Natalia Y Ganushkina, Michael Gedalin, Yuri Khotyaintsev, Homayon Aryan, Tuija I Pulkkinen, Michael A Balikhin, Direct Evidence of Nonstationary Collisionless Shocks in Space Plasmas, AGU Fall Meeting, San Francisco, Dec 2019. Invited oral presentation.

2018

94. Emilia Kilpua, A. Balogh, R. von Steiger, Y. Liu, H.E.J. Koskinen, T.I. Pulkkinen, Solar wind and its large-scale transients causing space weather at Earth , 15th Asia Oceania Geosciences Society Annual Meeting, Honolulu, US, June 2018, invited oral presentation.

2017

93. Pulkkinen, T.I., Understanding the space environment: simulations, statistics and space weather, EGU General Assembly, Julius Bartels Medal Lecture, Vienna, Austria, April 2017.
92. Pulkkinen, T. I., Modeling the space environment: processes and predictions, Advancing Plasma Physics from the Sun to the Earth, Breckenridge, Colorado, USA, May 2017. Invited oral presentation.

2016

91. Palmroth, M., Hoilijoki, S., Pfau-Kempf, Y., Hietala, H., Nishimura, T., Angelopoulos, V., Pulkkinen, T. I., Ganse, U., von Althaus, S., and Vainio, R, Large-scale kinetic simulation of the magnetosphere, EGU General Assembly, Vienna, Austria, March 2016. Invited oral presentation.
90. Tuija I. Pulkkinen and Andrew Dimmock, Long-term changes in the magnetosheath: Solar wind drivers and magnetospheric effects, Space Climate Symposium, Levi, Finland, April 2016. Invited oral presentation.
89. A. P. Dimmock, T. I. Pulkkinen, and K. Nykyri, Magnetosheath dawn-dusk asymmetries and their impact on solar wind - magnetosphere coupling processes, COSPAR General Assembly, Istanbul, Turkey, August 2016. Invited oral presentation.

2015

88. Tuija I. Pulkkinen, Andrew P. Dimmock, Adnane Osmane, Eija I. Tanskanen, Noora Partamies, Solar wind - magnetosphere coupling during solar cycles 23-24, Asia Oceania Geosciences Society Annual Meeting, August 2015. Invited oral presentation.
87. Tuija I. Pulkkinen, Andrew P. Dimmock, Adnane Osmane, Reza Naderpour, and Antti Lakka, Katariina Nykyri, Emilia Kilpua, Minna Myllys, Magnetosheath influence on reconnection and viscous interaction driven energy transfer through magnetopause, Asia Oceania Geosciences Society Annual Meeting, August 2015. Invited oral presentation.
86. Palmroth, M., Hoilijoki, S., Kempf, Y., Laitinen, T. V., Hietala, H., Pulkkinen, T. I., Ganse, U., Sandroos, A., Hanneksela, O., von Althaus, S., and Vainio, R., Reconnection in Vlasovator 1: The global system, Magnetic reconnection in plasmas, Nordita, Stockholm, Sweden, 2015. Invited oral presentation.

2014

85. Tuija I. Pulkkinen, Role of reconnection in energy input from solar wind to the magnetosphere - ionosphere system, Parker workshop on magnetic reconnection, Sao Jose dos Campos, Brazil, March 2014. Invited oral presentation.

2013

84. T. I. Pulkkinen, N. Partamies, E. I. Tanskanen, E. Kilpua, M. Palmroth, J. Kissinger, R. L. McPherron, Is There a Minimum Number of Substorms During Protracted Solar Minima?, AGU Chapman Conference on Causes and Consequences of the Extended Solar Minimum Between Solar Cycles 23 and 24 (4CESM). Invited oral presentation.

- 83. Robert L McPherron, Daniel N Baker, Tuija Pulkkinen, Why Were Electrojets Weaker during the Last Solar Minimum in 2008?, AGU Chapman Conference on Causes and Consequences of the Extended Solar Minimum Between Solar Cycles 23 and 24 (4CESM). Invited oral presentation.
- 82. Tuija I. Pulkkinen, Significance of ground-based magnetic observations in the satellite era, 40th Anniversary of the Greenland Magnetometer Array and IMAGE 2013 Meeting, Copenhagen, May 2013. Invited oral presentation.

2011

- 81. M. Palmroth, H. E. J. Koskinen, T. I. Pulkkinen, P. K. Toivanen, P. Janhunen, S. E. Milan, M. Lester, E. A. Lucek, and I. Dandouras, Magnetospheric feedback in solar wind energy transfer, Stelab Conference on Earth-Sun system exploration variability in space plasma phenomena, Kona, Hawaii, USA, 2011. Invited oral presentation.

2009

- 80. M. Palmroth, C. R. Anekallu, T. V. Laitinen, I. Honkonen, H. E. J. Koskinen, and T. I. Pulkkinen, Quantifying energy circulation in the near-Earth space, IAGA General Assembly, Sopron, Hungary, 2009. Invited oral presentation.
- 79. Pulkkinen, T. I., Nonlinear solar wind - magnetosphere coupling using MHD models, Modern challenges in nonlinear plasma physics, Sani Resort, Halkidiki, Greece, June 2009. Invited oral presentation.
- 78. Pulkkinen, T. I., Solar wind - magnetosphere interaction, Space Climate School, Saariselka, March 2009. Invited lecture.
- 77. Pulkkinen, T. I., New challenges in magnetospheric physics, FinCOSPAR meeting, Rokua, September 2009. Invited oral presentation.
- 76. Pulkkinen, T. I., From the Sun to the Earth: Coupling processes and magnetospheric modes, HAO, Boulder, CO, November 2009. Invited oral presentation.

2008

- 75. Tuija I. Pulkkinen, Influence on the solar wind on the inner magnetosphere, IMC, Korpilampi, Finland, 2008. Invited oral presentation.
- 74. Tuija I. Pulkkinen, Global simulations: What do they tell about the large-scale magnetospheric dynamics?, Geocosmos, St. Petersburg, Russia, 2008. Invited oral presentation.
- 73. Tuija I. Pulkkinen, Minna Palmroth, and Katerina Andreeova, Drivers and pathways of energy transfer from solar wind into the magnetosphere, Workshop on The Physical Processes for Energy and Plasma Transport across Magnetic Boundaries, Huntsville, Alabama, USA, 2008. Invited oral presentation.
- 72. Tuija I. Pulkkinen, Large-scale solar wind structures impacting the magnetosphere, EGU General Assembly, Vienna, Austria, 2009. Invited oral presentation.

2007

- 71. Tuija I. Pulkkinen, What can global MHD simulations tell us about the magnetosphere?, ISSS-8, Kauai, Hawaii, February, 2007.
- 70. T. I. Pulkkinen, Global magnetospheric dynamics from a simulation perspective, Invited presentation at the "Space: Science and Problems of XXI century" conference, Moscow, Russia, 2007.
- 69. T. I. Pulkkinen and T. V. Laitinen, Outer boundary conditions for the inner magnetosphere: Global simulation perspective, AGU Fall meeting, San Francisco, CA, USA, 2007. Invited oral presentation.

68. T. I. Pulkkinen, Inner magnetosphere dynamics: How the solar wind and outer magnetosphere drive the radiation belts and ring current, 4th European Space Weather Week, Brussel, Belgium, 2007. Invited oral presentation.

2006

67. T. I. Pulkkinen and M. Palmroth, The two-way solar wind - magnetosphere - ionosphere coupling, 2006 Yosemite workshop on Global Aspects of Magnetosphere-Ionosphere Coupling, Yosemite, USA, 2006. Invited oral presentation.
66. T. I. Pulkkinen, From the Sun to the Earth's surface: Empirical modeling of space weather effects, ISR colloquium, Los Alamos National Laboratory, Feb 15, 2006.
65. T. I. Pulkkinen, Thin current sheets as part of the substorm process, Eighth International Conference on Substorms, ICS-8, Banff, Canada, 2006. Invited oral presentation.
64. B. Hubert, M. Palmroth, S. E. Milan, A. Grocott, P. Janhunen, K. Kauristie, S. W. H. Cowley, T. I. Pulkkinen, and J.-C. Gerard, Monitoring the dayside and nightside reconnection rates during various auroral events using IMAGE-FUV and SuperDARN data, Eighth International Conference on Substorms, ICS-8, Banff, Canada, 2006. Invited oral presentation.
63. T. Pulkkinen, Global energy circulation in the magnetosphere: A simulations perspective, HAO seminar, High Altitude Observatory, Boulder, CO, March 8, 2006.
62. T. Pulkkinen, Storms in the inner magnetosphere: Magnetic configuration and ring current acceleration, LASP seminar, University of Colorado, Boulder, CO, March 9, 2006.
61. C. Goodrich, J. Lyon, and T. Pulkkinen, Understanding the magnetosphere during southward IMF driving of the magnetosphere during storms, SMC, sawtooth and substorm events through numerical simulations, Los Alamos National Laboratory, ISR-1 seminar, August 17, 2006.
60. T. I. Pulkkinen, Magnetospheric activity during storms, Los Alamos National Laboratory, ISR-1 seminar, September 5, 2006.
59. T. I. Pulkkinen, Solar wind - magnetosphere coupling during magnetic storms: stormtime substorms, sawtooth events, and steady convection periods, Boston University, Center for Space Physics, September 14, 2006.
58. T. I. Pulkkinen, Large-scale solar wind - magnetosphere coupling, ISROSES, Varna, Bulgaria, September 17-22, 2006.
57. T. I. Pulkkinen, Solar wind - magnetosphere energy transfer processes during magnetic storms, Physics of the solar wind - magnetosphere coupling, IGPP conference series, Puerto Vallarta, Mexico, November 4-8, 2006.

2005

56. M. Palmroth, T.I. Pulkkinen, T.V. Laitinen, D.N. Baker, C. Barth, and P. Janhunen, Does the solar wind north-south velocity component affect the hemispheric precipitation power?, EGU General Assembly, Vienna, Austria, 2005. Invited oral presentation.
55. Palmroth, M., Pulkkinen, T. I., Laitinen, T. V. and Janhunen, P., Sun-Earth coupling in global MHD simulations: Energy transfer and dissipation. European Geosciences Union, General Assembly, Vienna, April 25-29, 2005. Invited oral presentation.
54. T. I. Pulkkinen, M. Palmroth, T. V. Laitinen, P. Janhunen, M. A. Shukhtina, and V. A. Sergeev, Magnetospheric Energy Circulation: Characterization of Dynamic States from Observations and Global MHD Simulation, IAGA General Assembly, Toulouse, France, 2005. Invited oral presentation.
53. M. Palmroth, T. I. Pulkkinen, and P. Janhunen, Hemispheric asymmetries: A view from a global MHD simulation, IAGA General Assembly, Toulouse, France, 2005. Invited oral presentation.
52. T. Pulkkinen, Magnetospheric energy circulation: Global MHD simulation results, Los Alamos National Laboratory, ISR-1 seminar, Oct 21, 2005.

2003

51. M. Palmroth, P. Janhunen, T.I. Pulkkinen, Energy Transfer and Dissipation Calculated in Global MHD Simulation, ESPRIT, Effects of Space Weather on Technology Infrastructure, Greece, March 2003. Invited oral presentation.
50. T. I. Pulkkinen, Storm-substorm coupling: signatures of stormtime substorms, Auroral Phenomena And Solar-Terrestrial Relations, Moscow, Feb 2003. Invited oral presentation.
49. T. I. Pulkkinen, Space physics beyond space weather, AGU Fall Meeting, San Francisco, Dec 6-10, 2002, invited oral presentation.
48. T. I. Pulkkinen, M. Palmroth, P. Janhunen, Comparison of observations and global MHD simulations: GUMICS-4 performance during a storm and a substorm, EGS-AGU-EUG joint assembly, Nice, April 2003. Invited oral presentation.

2002

47. T. I. Pulkkinen, H. E. J. Koskinen, K. E. J. Huttunen, K. Kauristie, E. I. Tanskanen, and M. Palmroth, Effects of magnetic storms on substorm evolution, EGS XXVII General Assembly, Nice, France, April 2002. Invited oral presentation.
46. T. I. Pulkkinen, Magnetospheric stormy weather, EGS XXVII General Assembly, Nice, France, April 2002. Invited oral presentation.
45. Hannu E. J. Koskinen, Eija I. Tanskanen, Tuija I. Pulkkinen, On space weather energy budget in the magnetosphere, EGS XXVII General Assembly, Nice, France, April 2002. Invited oral presentation.
44. T. I. Pulkkinen, H. E. J. Koskinen, K. E. J. Huttunen, K. Kauristie, E. I. Tanskanen, and M. Palmroth, How do storms affect substorm development?, ICS-6, Blaine, Washington, USA, March 2002. Invited oral presentation.

2001

43. T. I. Pulkkinen, Space weather - what do storms in space do to us? Fysiikan paivat, Annual meeting of the Finnish Physical Society, March 2001. Invited lecture.
42. N. E. Turner, T. I. Pulkkinen, N. Yu. Ganushkina, M. V. Kubyshkina, Empirical modeling of stormtime inner magnetosphere configuration, Chapman conference on Storm-substorm relationships, India, 2001. Invited oral presentation.

2000

41. T. I. Pulkkinen, The future of magnetospheric physics, EGS XXV General Assembly, Nice, France, 25-29.4. 2000, invited oral presentation.
40. T. I. Pulkkinen, Energy dissipation during geomagnetic storms, 33rd COSPAR Scientific Assembly, Warsaw, Poland, 16-23 July 2000. Invited oral presentation.
39. T. I. Pulkkinen, How to address the accuracy of empirical magnetic field models?, 33rd COSPAR Scientific Assembly, Warsaw, Poland, 16-23 July 2000. Invited oral presentation.

1999

38. T. I. Pulkkinen, Modeling of magnetotail currents, Chapman conference on magnetospheric current systems, Kona, Hawaii, Jan 1999. Invited oral presentation.
37. T. I. Pulkkinen, Magnetic field models in various magnetospheric regions, European Geophysical Society XXIV General Assembly The Hague, The Netherlands, 19-23 April 1999. Invited oral presentation.

36. T. I. Pulkkinen, N. Ganushkina, D. N. Baker, N. T. Turner, J. B. Blake, J. F. Fennell, J. Roeder, T. A. Fritz, M. Grande, B. Kellett, G. Kettmann, Ring Current Ion Composition During Solar Minimum: POLAR/CAMMICE Results, European Geophysical Society XXIV General Assembly The Hague, The Netherlands, 19-23 April 1999. Invited oral presentation.
35. T. I. Pulkkinen, Reporter review: Dynamics of the geomagnetic tail, IUGG General Assembly, Birmingham, UK, July 1999. Invited oral presentation.
34. T. I. Pulkkinen and M. Wiltberger, Comparisons of empirical magnetic field models, MHD simulations, and ISTP observations, IUGG General Assembly, Birmingham, UK, July 1999. Invited oral presentation.
33. T. I. Pulkkinen, Modeling the Near-Earth plasma environment: Implications to astrophysical plasma systems, Moscow State University, Nuclear Physics Institute, Moscow, Russia, September 1999. Invited oral presentation.
32. T. I. Pulkkinen, A global view of substorms: observations, empirical models and MHD simulations, Space Research Institute of the Russian Academy of Sciences, Moscow, Russia, September 1999. Invited oral presentation.
31. Tuija I Pulkkinen and Hannu E J Koskinen, Multipoint measurements in the magnetosphere: ISTP results and challenges for Cluster II, Cluster workshop, September 1999. Invited oral presentation.

1998

30. T. I. Pulkkinen, Coupling of inner tail and midtail processes prior to substorm onset, ICS-4, March 1998, Japan.
29. T. I. Pulkkinen, Comparison of inner tail and midtail processes prior to the substorm onset, American Geophysical Union Spring Meeting, 1998. Invited oral presentation.
28. T. I. Pulkkinen, The Sun-Earth connection: Particle acceleration in the Earth's magnetosphere, CESRA (Community of European Solar Radio Astronomers) Workshop on Coronal explosive events, June 1998, Espoo, Finland. Invited oral presentation.
27. T. I. Pulkkinen, The Sun-Earth connection: How does solar activity affect the near-Earth space, URSI/Remote sensing club of Finland/IEEE, XXIII Convention on radio science and remote sensing symposium, Espoo, Finland, August 1998. Invited oral presentation.
26. T. I. Pulkkinen, Finnish Space Weather initiatives, ESA Workshop on Space Weather, Nov. 1998, ESTEC, Noordwijk, The Netherlands. Invited oral presentation.
25. T. I. Pulkkinen, Magnetospheric electrodynamics: Energetic particle signatures of geomagnetic storms and substorms, ESA Workshop on Space Weather, Nov. 1998, ESTEC, Noordwijk, The Netherlands. Invited oral presentation.

1997

24. T. I. Pulkkinen, Modeling magnetospheric dynamics: substorms as seen from ground and space, Laboratory for Atmospheric and Space Physics, University of Colorado, Boulder, CO, USA, Feb. 20, 1997.
23. T. I. Pulkkinen, Polar auroras - a manifestation of instability within a thin current sheet in the magnetotail, Center for Integrated Plasma Studies, University of Colorado, Boulder, CO, USA, Apr 24, 1997.
22. T. I. Pulkkinen, Substorm energetics and global configuration changes: ISTP observations and magnetic field modeling, Symposium on Solar-Terrestrial Coupling Processes, Paros, Greece, June 1997.
21. T. I. Pulkkinen, P. T. Toivanen, and D. N. Baker, Acceleration of O⁺ into the magnetotail, AGU Spring Meeting, 1997.
20. T. I. Pulkkinen, Reporter review: Dynamics of the geomagnetic tail, 8th Scientific Assembly of IAGA, Uppsala, Sweden, August, 1997.

19. T. I. Pulkkinen, Magnetic field models: Their strengths and limitations, 8th Scientific Assembly of IAGA, Uppsala, Sweden, August, 1997.
18. T. I. Pulkkinen, What is the magnetospheric counterpart of discrete auroras?, 8th Scientific Assembly of IAGA, Uppsala, Sweden, August, 1997.
17. T. I. Pulkkinen, Two active tail regions at substorm onset, Los Alamos National Laboratory, Los Alamos, NM, USA, Nov. 17, 1997.
16. T. I. Pulkkinen, Roles of two active tail regions in the substorm onset process, AGU Fall Meeting, 1997, invited oral presentation.

1996

15. T. I. Pulkkinen, Do pseudobreakups occur within thin current sheets? 3rd International Conference on Substorms, Versailles, France, May 12-19, 1996.
14. T. I. Pulkkinen, Large-scale structure of the magnetotail, Chapman Conference on The Earth's Magnetotail: New perspectives, Nov 5-9, 1996, Kanazawa, Japan.
13. T. I. Pulkkinen, Large-scale structure and dynamics of the magnetosphere: magnetic field modeling results, Space Environment Center, NOAA, Boulder, CO, USA, Oct. 17, 1996.

1995

12. T. I. Pulkkinen, Global substorm cycle: What can the models tell us? 20th General Assembly of the EGS, Hamburg, April, 1995.
11. T.I. Pulkkinen, Empirical magnetic field models: Present status and future prospects, Second International workshop for the coordination of ground-based observations and Cluster, Rome, Italy, April 1995.
10. T. I. Pulkkinen, Growth phase signatures during multiple substorm periods, Invited review at Symposium IS 211/309 of the XXI General Assembly of IUGG, Boulder, CO, July 1995.
9. T. I. Pulkkinen, Magnetospheric models and their critical evaluation, Invited oral presentation at the Radiation Belt Workshop: Models and Standards, Brussels, Oct. 17-20, 1995.

1993

8. T. I. Pulkkinen, Observations and modeling of the substorm recovery phase, Aerospace Corporation, Los Angeles, CA, May 14, 1993.
7. T. I. Pulkkinen, Time-evolving magnetic field models during substorms - a roadmap to the magnetosphere, IGPP/UCLA, Los angeles, CA, May 18, 1993.
6. T. I. Pulkkinen, Time-dependent models for the magnetic field changes observed during substorms, 1993 Geospace Environment Modeling (GEM) Workshop - Magnetotail/Substorm campaign, Snowmass, CO, July 1-2, 1993.

1992

5. T. I. Pulkkinen, Thin current sheets in the magnetotail, NASA/Goddard Space Flight Center, Laboratory for Extraterrestrial Physics, Greenbelt, MD, May 8, 1992.

1991

4. T. I. Pulkkinen, Modeling of magnetic field development during substorm growth phase, Institute of Geophysics and Planetary Physics, University of California, Los Angeles, CA, May 9, 1991.
3. T. I. Pulkkinen, Magnetic field modeling during substorm growth phase: Particle scattering and current sheet stability, NASA/Goddard Space Flight Center, Laboratory for Extraterrestrial Physics, Greenbelt, MD, June 14, 1991.
2. T. I. Pulkkinen, Magnetic field modeling during substorm growth phase: Particle scattering and current sheet stability, Space Physics Seminars, Autumn 1991, University of Oulu, Department of Physics, Oulu, Nov. 26, 1991.

1990

1. T. I. Pulkkinen, Magnetic field modeling during substorms, Johns Hopkins University, Applied Physics Laboratory, Laurel, MD, October 21, 1990.

Conference abstracts

2025

572. Daniel T. Welling, University of Michigan, Ann Arbor, MI; and P. Dredger, M. Burleigh, A. Bukowski, A. Ridley, G. Toth, and T. Pulkkinen, Two-Way SWMF-GITM Coupling for Space Weather Applications, American Meteorological Society Annual Meeting, New Orleans, Jan 2025.
571. Shannon Hill, Tuija Pulkkinen, Anita Kullen, Austin Brenner, Qusai Al Shidi, Matti Ala-Lahti, Agnit Mukhopadhyay, Allison Jaynes, Beyond solar storms: theta auroras illuminate the path of solar wind-magnetosphere-ionosphere energy transfer during northward IMF conditions, International Conference on Arctic Research Planning (ICARP IV), Boulder, CO, March 2025.
570. Vivian Cribb, Tuija Pulkkinen, Bea Gallardo-Lacourt, Larry Kepko, Noora Partamies, Auroral omega bands: Solar wind drivers and role in storm and substorm processes, EGU General Assembly, Vienna, Austria, April 2025.
569. Mojtaba Akhavan-Tafti, Les Johnson, Adam Szabo, David Lario, Guan Le, Lynn Wilson, Lan Jian, Douglas Biesecker, James A. Slavin, Tuija Pulkkinen, Sue Lepri, Ward Manchester, Rohan Sood, Dominique Fontaine, Emilia Kilpua, Omar Leon, Nishtha Sachdeva, Tsige Atilaw, Matti Ala-Lahti, Shirsh Lata Soni, Space Weather Investigation Frontier (SWIFT): Distinguishing between Local and Global Processes Driving Space Weather, EGU General Assembly, Vienna, Austria, April 2025.
568. Matti Ala-Lahti, Tuija Pulkkinen, Austin Brenner, Nolan Tribu, Timothy Keebler, and Emilia Kilpua, Quantifying the Importance of Upstream Magnetic Field Fluctuations for Solar Wind-Magnetosphere Coupling, EGU General Assembly, Vienna, Austria, April 2025.
567. Austin Brenner, Tuija Pulkkinen, Mike Liemohn, Revealing Magnetosphere Feedback on Solar Wind - Magnetosphere Coupling via Numerical Experiment, EGU General Assembly, Vienna, Austria, April 2025.
566. Tuija Pulkkinen, Timothy Keebler, Yuxi Chen, and Xiantong Wang, MHD-AEPIC: Coupled MHD-kinetic simulation of global, meso-, and small-scale magnetospheric phenomena. EGU General Assembly, Vienna, Austria, April 2025.
565. M. Alho, D. Trotta, F. Valentini and the Gianni team (inclusive of T. Pulkkinen), ESA Plasma Observatory's Group on simulAtioN NumerIcal support (GIANNI). EGU General Assembly, Vienna, Austria, April 2025.

2024

564. Connor DiMarco, Tuija Pulkkinen and Vivian Cribb, High Energy Particle Measurements at Geostationary Orbit and their Relation-ship with Omega Band Formation, MIPSE annual meeting, University of Michigan, November 2024. Poster presentation.
563. Tuija Pulkkinen, Austin Brenner, Matti Ala-Lahti, Anushree Manwatkar, Vivian Cribb, Larry Kepko, Ian Mann, Hannah Parry, Darcy Cordell, Mesoscale dynamics driven by an external energy pulse during a moderate magnetic storm, AGU Fall Meeting, Washington DC, December 2024.
562. Matti Ala-Lahti, Tuija I. Pulkkinen, Austin Brenner, Nolan Tribu, and Timothy Keebler, Statistics of Energy Transfer Through the Magnetopause from Spacecraft Observations and Comparison to Global Simulations, AGU Fall Meeting, Washington DC, December 2024.
561. Vivian Cribb, Tuija Pulkkinen, Bea Gallardo-Lacourt, Larry Kepko, Noora Partamies, Role of auroral omega bands in storm and substorm processes, AGU Fall Meeting, Washington DC, December 2024.
560. T. Y. Atilaw, M. Akhavan-Tafti, D. Fontaine, O. Le Contel, J. A. Slavin and T. I. Pulkkinen, Magnetospheric Time-History in Storm-Time Magnetic Flux Dynamics: Solar Wind Dependence, AGU Fall Meeting, Washington DC, December 2024.
559. Austin Brenner, Shannon Hill, Tuija Pulkkinen, Anita Kullen, Magnetosphere Energy Transport Analysis for the May 15, 2005 Theta Aurora Event, AGU Fall Meeting, Washington DC, December 2024.

558. Austin Brenner, Tuija Pulkkinen, Visualizing the Radiation Belts During Geomagnetic Storm Conditions, AGU Fall Meeting, Washington DC, December 2024.
557. Shannon Hill, Tuija Pulkkinen, Anita Kullen, Matti Ala-Lahti, Austin Brenner, Qusai Al Shidi, Agnit Mukhopadhyay, Complex polar cap and magnetotail configurations during theta aurora formation, AGU Fall Meeting, Washington DC, December 2024.
556. Connor DiMarco, Tuija I Pulkkinen, and Michael G Henderson, Leveraging Multi-Mission Observations to Deepen Understanding of Magnetospheric Sawtooth Events, AGU Fall Meeting, Washington DC, December 2024.
555. Vivian Cribb, T. I. Pulkkinen, L. Kepko, B. Gallardo-Lacourt, E. Donovan, Solar wind drivers of auroral omega bands, GEM annual meeting, Fort Collins, CO, June 2024.
554. Vivian Cribb, T. I. Pulkkinen, L. Kepko, B. Gallardo-Lacourt, E. Donovan, Dawnside storm-time wedge current systems and their relation to mesoscale auroral and magnetospheric dynamics
553. Shannon Hill, Implications of northward IMF reconnection with ionospheric convection reversal, GEM annual meeting, Fort Collins, CO, June 2024.
552. Shannon Hill, Tuija Pulkkinen, Anita Kullen, Matti Ala-Lahti, Austin Brenner, Qusai Abdulla Al Shidi, Theta aurora: the importance of reconnection during northward IMF, GEM annual meeting, Fort Collins, CO, June 2024.
551. Yining Shi, Interhemispheric Asymmetries in Large Magnetic Field Residuals between Swarm Observations and Earth Magnetic Field Model during Non-storm Times, GEM annual meeting, Fort Collins, CO, June 2024.
550. Austin Brenner
549. Connor DiMarco, Tuija Pulkkinen, and Michael Henderson, Inner Magnetosphere Observations of Sawtooth Oscillations, GEM annual meeting, Fort Collins, CO, June 2024.
548. M. Ala-Lahti, T. I. Pulkkinen, A. Brenner, Q. Al-Shidi, and S. Hill, The Impact of Solar Wind ULF Fluctuations on Magnetospheric Energetics, GEM annual meeting, Fort Collins, CO, June 2024.
547. Yining Shi, Shasha Zou, and Tuija Pulkkinen, Space-and Ground-based Observations and Simulation of SAPS During A Weak Storm, GEM annual meeting, Fort Collins, CO, June 2024.
546. Thomas Berger, Tzu-Wei Fang, Timothy Fuller-Rowell, Adam Kubaryk, Naomi Maryuma, Eric Sutton, Valery Yudin, Zhenguang Huang, Tuija Pulkkinen, Aaron Ridley, Gabor Toth, Daniel Welling, Shasha Zou, Improving thermospheric neutral density forecasting with the NOAA/WAM-IPE model. COSPAR General Assembly, South Korea, July 2024.
545. Thomas Berger, Tuija Pulkkinen, Daniel Baker, Tamas Gombosi, and the SWORD Team, The Space Weather Operational Readiness Development (SWORD) Center - an international focal point for orbital space weather forecasting research, COSPAR General Assembly, Bexco, Busan, South Korea, July 2024.
544. Thomas Berger, Tuija Pulkkinen, Daniel Baker, Tamas Gombosi, and the SWORD Team, The Space Weather Operational Readiness Development (SWORD) Center – improving orbital space weather forecasting via model coupling and data assimilation, American Meteorological Society Annual Meeting, Baltimore, MD, Jan 2023
543. Vivian Cribb, Tuija Pulkkinen, Bea Gallardo-Lacourt, Larry Kepko, Mackenzie Ratzlaff, Eric Donovan, Exploring solar wind drivers of omega bands, EGU General Assembly, Vienna, Austria, April 2024.

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542. Tuija I. Pulkkinen, Matti Ala-Lahti, Qusai Al Shidi, Austin Brenner, Shannon Hill, and Daniel Welling, Impact of IMF Fluctuations on Geoeffectiveness of the Solar Wind Driver, AGU Fall Meeting, San Francisco, CA, December 2023.

541. Connor DiMarco, Tuija Pulkkinen, Michael Henderson, Sanjay Kumar, Matti Ala-Lahti, Shannon Hill, Magnetosphere Sawtooth Events in Solar Cycle 24, AGU Fall Meeting, San Francisco, CA, December 2023.
540. Mojtaba Akhavan-Tafti, Les Johnson, Adam Szabo, David Lario, Guan Le, Lynn Wilson, Lan Jian, Douglas Biesecker, James A. Slavin, Tuija Pulkkinen, Sue Lepri, Ward Manchester, Rohan Sood, Dominique Fontaine, Emilia Kilpua, Omar Leon, Nishtha Sachdeva, Tsige Atilaw, Matti Ala-Lahti, Shirsh Lata Soni, Space Weather Investigation Frontier (SWIFT), AGU Fall Meeting, San Francisco, CA, December 2023.
539. T. Y. Atilaw, M. Akhavan-Tafti, D. Fontaine, O. Le Contel, J. A. Slavin and T. I. Pulkkinen, Time History Analysis of Magnetospheric Response to Solar Wind Jump Conditions, AGU Fall Meeting, San Francisco, CA, December 2023.
538. Qusai Al Shidi, Tuija Pulkkinen, and Dan Welling, Effects of Solar Wind Propagation on Global Simulations of the Magnetosphere during Storm Times, AGU Fall Meeting, San Francisco, CA, December 2023.
537. M. Ala-Lahti, T. I. Pulkkinen, J. Ruohotie, M. Akhavan-Tafti, S. W. Good, and E. K. J. Kilpua, Multi-point observations of the dynamics at an ICME sheath-ejecta boundary, AGU Fall Meeting, San Francisco, CA, December 2023.
536. Sanjay Kumar, Tuija Pulkkinen, Connor DiMarco, Austin Brenner and Matti Ala-Lahti, Statistical study of magnetotail evolution during different phases of substorm, AGU Fall Meeting, San Francisco, CA, December 2023.
535. Thomas Berger, Tuija Pulkkinen, Daniel Baker, Tamas Gombosi, and the SWORD team, The Space Weather Operational Readiness Development (SWORD) Center – a new NASA Space Weather Center of Excellence, AGU Fall Meeting, San Francisco, CA, December 2023.
534. Austin Brenner, Tuija Pulkkinen, Dan Welling, and Mike Liemohn, Analyzing the Connection Between Magnetosphere Energy Transport and Ionosphere Convection, AGU Fall Meeting, San Francisco, CA, December 2023.
533. Shannon Hill, Tuija Pulkkinen, Anita Kullen, Austin Brenner, Qusai Al Shidi, Stephen Milan, Agnit Mukhopadhyay, Harald Frey, Shasha Zou, and Michael Liemohn, Multiple SWMF Simulations Reveal Midnight-type Theta Aurora Formation Characteristics, AGU Fall Meeting, San Francisco, CA, December 2023.
532. Thomas Berger, Tuija Pulkkinen, Daniel Baker, Tamas Gombosi, and the SWORD Team, The Space Weather Operational Readiness Development (SWORD) Center of Excellence – a new NASA program for the study of orbital and cis-lunar space weather, SEASONS meeting, Maryland, Nov 2023.
531. Minna Palmroth, Pulkkinen, T.I., Ganse, U., Pfau-Kempf, Y., Koskela, T., Zaitsev, I., Alho, M., Cozzani, G., Turc, L., Battarbee, M., Dubart, M., George, H., Gordeev, E., Grandin, M., Horaites, K., Osmane, A., Papadakis, K., Suni, J., Tarpus, V., Zhou, H., and Nakamura, R., Magnetotail plasmoid eruption: Interplay of instabilities and reconnection, GEM annual meeting, San Diego, CA, June 2023.
530. M. Ala-Lahti, T. I. Pulkkinen, A. Brenner, Q. Al Shidi, S. Hill, S. Kumar, and C. DiMarco, The impact of solar wind ULF fluctuations on space weather, GEM annual meeting, San Diego, CA, June 2023.
529. Sanjay Kumar, Tuija Pulkkinen, and Jesper Gjerloev, Statistical study of Earth's magnetotail during different phases of substorms, GEM annual meeting, San Diego, CA, June 2023.
528. Shannon Hill, Tuija Pulkkinen, Qusai Al Shidi, and Austin Brenner, High-altitude sources of theta aurora, GEM annual meeting, San Diego, CA, June 2023.
527. Austin Brenner, Tuija Pulkkinen, Gabor Toth, and Qusai Al Shidi, Quantifying the Dungey Cycle at Earth's Magnetosphere, GEM annual meeting, San Diego, CA, June 2023.
526. Qusai Al Shidi, Tuija Pulkkinen, and Austin Brenner, Uncertainties in Geomagnetic Indices due to Solar Wind Propagation, GEM annual meeting, San Diego, CA, June 2023.
525. Shannon Hill and Tuija Pulkkinen, The history of northern lights: Observations from 30,000 BCE to present, Michigan Geophysical Union, oral presentation.

- 524. A. Brenner, Q. Al Shidi, T. Pulkkinen, Dissecting Earth's magnetosphere: External vs internal energy transfer pathways, Michigan Geophysical Union, poster presentation.
- 523. R. Jarvinen, E. Kallio, T.I. Pulkkinen, Global hybrid modeling of ultra-low frequency solar wind foreshock waves at Mercury, Venus, Earth and Mars, URSI General Assembly, Hokkaido, Japan, 2023.
- 522. Sanjay Kumar, Tuija Pulkkinen, Connor DiMarco, and Austin Brenner, Statistical study of substorm recovery phases in the inner magnetosphere and magnetotail, EGU General Assembly, Vienna, Austria, April 2023. Poster presentation.
- 521. Minna Palmroth, Tuija I. Pulkkinen, Urs Ganse, Yann Pfau-Kempf, Tuomas Koskela, Ivan Zaitsev, Markku Alho, Giulia Cozzani, Lucile Turc, Markus Battarbee, Maxime Dubart, Harriet George, Evgeniy Gordeev, Maxime Grandin, Konstantinos Horaites, Adnane Osmane, Konstantinos Papadakis, Jonas Suni, Vertti Tarvus, Hongyang Zhou and Rumi Nakamura, Magnetotail plasmoid eruption: Interplay of instabilities and reconnection, EGU General Assembly, Vienna, Austria, April 2023.
- 520. Shannon Hill, Tuija Pulkkinen, Austin Brenner, Qusai Abdulla Al Shidi, Agnit Mukhopadhyay, Anita Kullen, Harald Frey, Shasha Zou, Michael Liemohn, The Magnetospheric Source of Theta Aurora Include Dayside and Nightside Multiple Reconnection Sites: SWMF Geospace Simulation Results, EGU General Assembly, Vienna, Austria, April 2023. Poster presentation.
- 519. Qusai Al Shidi, Tuija Pulkkinen, Dan Welling, Uncertainty Quantification in Global Simulations: Solar Wind Propagation Effects, EGU General Assembly, Vienna, Austria, April 2023. Poster presentation.
- 518. Austin Brenner, Tuija Pulkkinen, and Qusai Al Shidi, Detailed look at energy dynamics in Earth's magnetosphere using simulation, EGU General Assembly, Vienna, Austria, April 2023. Oral presentation.
- 517. Connor DiMarco, Tuija Pulkkinen, Sanjay Kumar, Statistics of Magnetospheric Sawtooth Oscillations, EGU General Assembly, Vienna, Austria, April 2023. Poster presentation.
- 516. Matti Ala-Lahti, Tuija I. Pulkkinen, Julia Ruohotie Mojtaba Akhavan-Tafti, Simon W. Good, and Emilia K. J. Kilpua, Magnetic reconnection in the solar wind: Filamentary currents in a multi-layered exhaust region at an ICME sheath – ejecta boundary, EGU General Assembly, Vienna, Austria, April 2023. Poster presentation.

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- 515. Matti Ala-Lahti, Andrew P Dimmock, Tuija I Pulkkinen, Simon Good, Emiliya Yordanova, Lucile Turc, K Emilia J Kilpua, Fine Structure of Geoeffective Solar Wind Transients Complicating Space Weather Predictions, AGU Fall Meeting, Chicago, IL, USA, December 2022.
- 514. Matti Ala-Lahti, Tuija I. Pulkkinen, Austin Brenner, Yann Pfau-Kempf, Maxime Grandin, and Minna Palmroth, Energy Transfer Through the Magnetopause in Global Simulations, AGU Fall Meeting, Chicago, IL, USA, December 2022.
- 513. T. Y. Atilaw, M. Akhavan-Tafti, D. Fontaine, O. Le Contel, J. A. Slavin, T. Pulkkinen, and D. Turner, A statistical study of the storm-time magnetospheric magnetic flux dynamics using cross-scale observations from the Heliophysics System Observatory (HSO), AGU Fall Meeting, Chicago, IL, USA, December 2022.
- 512. Austin Brenner, Tuija Pulkkinen, Qusai Al Shidi, Michael Liemohn, Do the Biot-Savart integration and virial theorem tell the same story about magnetospheric energy budget?, AGU Fall Meeting, Chicago, IL, USA, December 2022.
- 511. Tuija Pulkkinen, Austin Brenner, Qusai Al Shidi, Gabor Toth, How well do geomagnetic indices predict storm evolution in observations and simulations?, AGU Fall Meeting, Chicago, IL, USA, December 2022.
- 510. Qusai al Shidi, Tuija Pulkkinen, Austin Brenner, Gabor Toth, Uncertainties in Simulation of Ground Magnetometer Records Arising From Solar Wind Input Errors, AGU Fall Meeting, Chicago, IL, USA, December 2022.
- 509. Shannon Hill, Tuija Pulkkinen, Austin Brenner, Qusai Al Shidi, Magnetic topology of transpolar arcs as seen by global MHD simulation, AGU Fall Meeting, Chicago, IL, USA, December 2022.

508. Shannon C. Hill, Matti Ala-Lahti, Tuija I. Pulkkinen, Austin Brenner, and Emilia K. J. Kilpua, Tracing the impacts of an ICME shock on the magnetosphere: Comparison of observations and SWMF simulation results, SHINE conference, Honolulu, Hawaii, June 2022. Poster presentation.
507. Austin Brenner, Tuija I. Pulkkinen, Matti Ala-Lahti, How does the planetary bow shock at earth process ICME shock, sheath, and ejecta? An MHD simulation event study, SHINE conference, Honolulu, Hawaii, June 2022. Poster presentation.
506. A. Brenner, M. Ala-Lahti, and T. Pulkkinen, How did a mild geomagnetic storm deorbit 40 Starlink satellites? Michigan Geophysical Union, April 2022.
505. S. Hill and T. Pulkkinen, The elusive theta aurora: How to reproduce unique auroral forms in simulations of the Earth's magnetic field? Michigan Geophysical Union, April 2022.
504. M. Berthomier, A. Fazakerley, V. Angelopoulos, M. Archer, M. Balikhin, F. Califano, R. D'Amicis, J. de Keyser, J. Eastwood, M. Echim, R. Ergun, H. Frey, H. Gunell, B. Hubert, N. Ivchenko, K. Kauristie, Y. Khotyaintsev, L. Lamy, B. Lavraud, W. Lotko, R. Lysak, A. Marchaudon, O. Marghitu, S. Merkin, M. Palmroth, E. Panov, J.-L. Pinçon, F. Platschke, T. Pulkkinen, L. Ray, H. Rothkaehl, O. Santolik, T. Sarris, R. Torbert, R. Wimmer-Schweingruber, and the Alfvén M7 Team, The Alfvén mission for ESA's M7 Call, COSPAR General Assembly, Athens, Greece, July 2022.
503. R. Jarvinen, E. Kallio and T.I. Pulkkinen, Global hybrid modeling of ultra-low frequency solar wind foreshock waves at Mercury, Venus and Mars, EGU General Assembly, Vienna, April 2022.
502. Minna Palmroth et al., Substorm onset and current sheet flapping in a 6D global ion-kinetic simulation, EGU General Assembly, Vienna, April 2022.
501. Austin Brenner, Tuija Pulkkinen, Gabor Toth, Qusai Al Shidi, and Michael Liemohn, Using the Virial Theorem to Analyze Effects of Energy Dynamics in the Magnetosphere, EGU General Assembly, Vienna, April 2022.
500. Shannon Hill, Tuija I Pulkkinen, Qusai Abdulla Al Shidi, Austin Brenner, Agnit Mukhopadhyay, Shasha Zou, and Michael Liehmon, Magnetospheric Source of a Transpolar Auroral Arc: Coupled SWMF Simulation results, EGU General Assembly, Vienna, April 2022.
499. Qusai Al Shidi, Tuija Pulkkinen, and Austin Brenner, Prediction of Regional Ground Magnetic Disturbances with the Space Weather Modeling Framework, EGU General Assembly, Vienna, April 2022.
498. R. Jarvinen, E. Kallio, and T. I. Pulkkinen, Global hybrid modeling of Mercury's solar wind interaction and preparing for in situ observations by BepiColombo, URSI Atlantic Radio Science, 2022.

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497. R. Jarvinen, E. Kallio, and T. I. Pulkkinen, Global hybrid modeling of ultra-low frequency waves and ion escape at Venus and Mars, AGU Fall Meeting, New Orleans, LA, USA, December 2021.
496. Daniel Iong Yang Chen, Enrico Camporeale, Tamas I Gombosi, Tuija I Pulkkinen, Gabor Toth, and Shasha Zou, Interpretable Machine Learning Methods for forecasting the SYM-H Index, AGU Fall Meeting, New Orleans, LA, USA, December 2021.
495. Tamas I. Gombosi, Tuija I. Pulkkinen, and Natalia Y. Ganushkina, SOLSTICE: Space Weather Modeling meets Machine Learning, AGU Fall Meeting, New Orleans, LA, USA, December 2021.
494. Qusai A Al Shidi, Tuija I Pulkkinen, Austin Brenner, Gabor Toth, Shasha Zou, and Tamas I Gombosi, Terrestrial impacts of global geospace modeling of an ensemble of storms, AGU Fall Meeting, New Orleans, LA, USA, December 2021.
493. Shannon Hill, Tuija I. Pulkkinen, Qusai Al Shidi, Austin Brenner, and Shasha Zou, Formation of transpolar auroral arc during geomagnetically disturbed conditions, AGU Fall Meeting, New Orleans, LA, USA, December 2021.

492. Minna Palmroth, Urs Ganse, Markku Alho, Jonas Suni, Maxime Grandin, Yann Pfau-Kempf, Markus Batarbee, Lucile Turc, Andreas Johlander, Vertti Tarvus, Hongyang Zhou, Maarja Bussov, Maxime Dubart, Harriet George, Konstantinos Horaites, Talgat Mangalaye, Konstantinos Papadakis, Rumi Nakamura, Tuija I. Pulkkinen, First 6D hybrid-Vlasov modeling of the entire magnetosphere: Substorm onset and current sheet flapping, AGU Fall Meeting, New Orleans, LA, USA, December 2021.
491. Austin Brenner, Tuija I Pulkkinen, Qusai Al Shidi, Gabor Toth, Magnetosphere Energy Dynamics in 3D, Comparison to the Virial Theorem and Quantification of Macro Scale Dynamics During a Simulated Storm Event, AGU Fall Meeting, New Orleans, LA, USA, December 2021.
490. Daniel Iong, Yang Chen, Enrico Camporeale, Tuija Pulkkinen, Gabor Toth, Shasha Zou, Interpretable Machine Learning Methods for forecasting the SYM-H Index, virtual vGEM conference, July 2021.
489. Tamas I. Gombosi, Tuija Pulkkinen, Natalia Ganushkina and the SOLSTICE Team, SOLSTICE: Terrestrial Impacts, virtual vGEM conference, July 2021.
488. T. I. Gombosi, Y. Chen, D. Fouhey, N. Ganushkina, A. O. Hero, W. B. Manchester, T. Pulkkinen, I. Sokolov, G. Toth, and S. Zou, Physics-based SWx modeling with machine learning, GEM Workshop, 2021, Virtual poster presentation, July 2021.
487. Austin Brenner, Tuija I. Pulkkinen, Qusai Al Shidi, Gabor Toth, Tamas I. Gombosi, SOLSTICE - Terrestrial Impacts: Detailed study of energy transfer at the magnetopause surface, virtual vGEM conference, July 2021.
486. Qusai Al Shidi, Austin Brenner, Tuija Pulkkinen, Gabor Toth, Shasha Zou, A Statistical Study of Simulated Storms, virtual vGEM conference, July 2021.
485. Larry Kepko, Tuija Pulkkinen, Slava Merkin, Dan Baker, Rumi Nakamura, Christine Gabrielse, Minna Palmroth, Jonny Rae, Xuzhi Zhou, Magnetospheric Constellation - science drivers and implementation scheme, Helio2050 workshop, virtual meeting, May 2021.
484. C.M.S. Cohen, T. Berger, M.I. Desai, N. Duncan, G. Ho, N. Maruyama, T. Pulkkinen, A. Szabo, A. Vourlidas, E. Zesta, Y. Zhang, Living With a Star Architecture Committee Seeks Input, Helio2050 workshop, virtual meeting, May 2021.
483. Tamas I. Gombosi, Tuija Pulkkinen, Natalia Ganushkina, Spiro Antiochos, Nick Arge, Graham Barnes, Monica Bobra, Austin Brenner, Enrico Camporeale, Yang Chen, Yuxi Chen, Mark Cheung, David Fouhey, Alex Gloer, Alfred Hero, Michael Hesse, Richard Higgins, Bart van der Holst, Zhenguang Huang, Daniel Iong, Xianzhe Jia, Meng Jin, Spiridos Kasapis, Maria Kuznetsova, Enrico Landi, David Lario, KD Leka, Michael Liemohn, Lei Liu, Yang Liu, Ward Manchester, Mark Moldwin, Jiaen Ren, Aaron Ridley, Nishtha Sachdeva, Phil Scherrer, Peter Schuck, Qusai Al Shidi, Yinsi Shou, Howard Singer, Igor Sokolov, Hu Sun, Zeyu Sun, Judit Szente, Valeriy Tenishev, Gabor Toth, Stephanie Vasco, Xiantong Wang, Lulu Zhao, Shasha Zou, Solar Storms and Terrestrial Impacts Center: Where Machine Learning Meets Space Weather Modeling, Space Weather Workshop, virtual meeting, April 2021.
482. Tamas I. Gombosi, Y. Chen, D. Fouhey, N. Ganushkina, A. O. Hero, W. B. Manchester, T. Pulkkinen, I. Sokolov, G. Toth, and S. Zou, Physics-based SWx Modeling with Machine Learning, American Meteorological Society Annual Meeting, New Orleans, LA, USA, January 2021.
481. Shannon C. Hill and Pulkkinen, T. I., Uncovering the origins of satellite hazards: wave-particle interactions in space plasmas, ERS Conference, University of Michigan, virtual, April 2021.
480. Austin Brenner and Tuija Pulkkinen, Quantitative study of energy transfer at Earth's magnetopause, Michigan Geophysical Union, virtual meeting, April 2021.
479. R. Jarvinen, E. Kallio, and T. I. Pulkkinen, Mars-solar wind interaction in a global hybrid model: plasma waves and ion dynamics. vEGU General Assembly, virtual pico presentation, April 2021.
478. Esa Kallio, Riku Jarvinen, Shshikant Gupta, and Tuija Pulkkinen, Foreshocks of the terrestrial planets: Simulations of kinetic effects. vEGU General Assembly, virtual pico presentation, April 2021.
477. Austin Brenner and Tuija Pulkkinen, Investigating magnetopause dynamics using global magnetosphere simulation, vEGU General Assembly, virtual pico presentation, April 2021.

- 476. Tuija Pulkkinen, Shannon Hill Qusai Al Shidi, Austin Brenner and Shasha Zou, Formation and decay of a transpolar arc during a major magnetic storm onset, vEGU General Assembly, virtual pico presentation, April 2021.
- 475. R. Jarvinen, E. Kallio and T.I. Pulkkinen, Modulation of Ion Escape by Ultra-Low Frequency Waves at Venus and Mars: A Global Hybrid Model Perspective, MACH DRIVE Center workshop on Influence of a Global Magnetic Field on Ion and Atmospheric Loss and Planetary Habitability, Virtual, June 2021.
- 474. R. Jarvinen, E. Kallio and T.I. Pulkkinen, Modulation of ion escape by ultra-low frequency waves at Venus and Mars in a global hybrid simulation, EPSC, virtual, 2021.

2020

- 473. Shannon Hill and Tuija Pulkkinen, Using auroras to investigate the geospace magnetic topology, MIPSE annual meeting, University of Michigan, November 2020. Poster presentation.
- 472. Austin M. Brenner, Tuija I. Pulkkinen, Qusai Al Shidi, Gabor Toth, Tamas Gombosi, Understanding the limitations of system models for geomagnetic index prediction, AGU Fall Meeting, virtual, December 2020.
- 471. S. Hill, AGU Shannon Hill, Robert Michell, Marilia Samara, Donald Hampton, John W Bonnell, Oleksiy V. Agapitov, Aaron W Breneman, Sheng Tian, and Tuija I Pulkkinen, When Pulsating Aurorae and Chorus Waves Don't Align: Comparing Simultaneous Observations with Gakona All Sky Camera and the Van Allen Probes , AGU Fall Meeting, virtual, December 2020.
- 470. Qusai Al Shidi, Tuija Pulkkinen, Gabor Toth, A Statistical Comparison of Simulations and Global Storm Indices, AGU Fall Meeting, virtual, December 2020.
- 469. Tuija I. Pulkkinen, Shannon Hill, Qusai Al Shidi, Austin M. Brenner, Shasha Zou, Case study of a transpolar arc during high geomagnetic activity, AGU Fall Meeting, virtual, December 2020.
- 468. R. Jarvinen, E. Kallio, and T.I. Pulkkinen, Global hybrid simulations of ultra-low frequency foreshock waves at Venus and Mercury, AGU Fall Meeting, December 2020.
- 467. Esa Kallio, Riku Jarvinen, Shashikant Gupta and Tuija I. Pulkkinen, Mercury-solar wind interaction: Simulations of kinetic effects, AGU Fall Meeting, December 2020.
- 466. A. Brenner, T. I. Pulkkinen, Q. Al Shidi, Defining the magnetopause and plasmashet in 3D MHD simulation for global energetics analysis, GEM Virtual Workshop, July 2020. Poster presentation.
- 465. S. Hill, T. I. Pulkkinen, and company, Pulsating aurora and magnetosonic waves, GEM Virtual Workshop, July 2020. Poster presentation.
- 464. R. Jarvinen, E. Kallio and T.I. Pulkkinen, Ultra-low frequency foreshock waves at Venus and Mercury in a global hybrid simulation, EPSC 2020.
- 463. R. Jarvinen, E. Kallio, and T. I. Pulkkinen, Update on Venus modeling activities at Aalto and FMI, Mars Express and Venus Express ASPERA team meeting, IRF, Kiruna, February 2020. Oral presentation.
- 462. Emilia Kilpua, Milla Kalliokoski, Liisa Juusola, Maxime Grandin, Antti Kero, Drew Turner, Allison Jaynes, Timo Asikainen, Stepan Dubyagin, Harriet George, Heli Hietala, Hannu Koskinen, Adnane Osmane, Minna Palmroth, Noora Partamies, Tuija Pulkkinen, Tero Raita, Lucile Turc, Rami Vainio, Differences in inner magnetospheric wave activity, outer Van Allen belt electron dynamics and atmospheric precipitation during CME sheaths and flux ropes, EGU General Assembly, Vienna, Austria, April 2020.
- 461. Yang Chen, David Fouhey, Tamas I. Gombosi, Natalia Ganushkina, Alfred Hero, Bart van der Holst, Zhen-guang Huang, Justin Kasper, Enrico Landi, Mike Liemohn, Ward Manchester, Tuija Pulkkinen, James Raines, James Slavin, Igor Sokolov, Valerii Tenishev, Gabor Toth, Shasha Zou, Monica Bobra, Todd Hoeksema, Yang Liu, Phil Scherrer, Spiro Antiochos, Maria Kuznetsova, Peter Schuck, Graham Barnes, KD Leka, Mark Cheung, Meng Jin, Howard Singer, Dan Welling, Michael Hesse, SOLSTICE: Space Weather Modeling Meets Machine Learning, EGU General Assembly, Vienna, Austria, April 2020.

460. R. Jarvinen, E. Kallio and T.I. Pulkkinen, Modulation of the solar wind driven ion escape from unmagnetized planets by ultra-low-frequency foreshock waves in a global hybrid simulation, EGU General Assembly, Vienna, Austria, April 2020.
459. Yang Chen, David Fouhey, Tamas I. Gombosi, Natalia Ganushkina, Alfred Hero, Bart van der Holst, Zhen-guang Huang, Justin Kasper, Enrico Landi, Mike Liemohn, Ward Manchester, Tuija Pulkkinen, James Raines, James Slavin, Igor Sokolov, Valerii Tenishev, Gabor Toth, Shasha Zou, Monica Bobra, Todd Hoeksema, Yang Liu, Phil Scherrer, Spiro Antiochos, Maria Kuznetsova, Peter Schuck, Graham Barnes, KD Leka, Mark Cheung, Meng Jin, Howard Singer, Enrico Camporeale., Dan Welling, Michael Hesse, SOLSTICE: Space Weather modeling meets machine learning, COSPAR Scientific Assembly, Melbourne, Australia, August 2020.

2019

458. T. I. Pulkkinen, Q. Al Shidi, S. Hill, E. Kilpua, and D. N. Baker, Magnetospheric Response to Driving by Complex ICMEs, AGU Fall Meeting, San Francisco, CA, Dec 2019.
457. S. Hill, M. Samara, R. Mitchell, J. W. Bonnell, D. Hampton, T. I. Pulkkinen, The Relationship between Pulsating Aurora and Chorus Waves: Comparing Simultaneous Observations with Gakona All Sky Camera and the Van Allen Probes, AGU Fall Meeting, San Francisco, CA, Dec 2019.
456. R. Jarvinen, M. Alho, E. Kallio and T.I. Pulkkinen, Solar wind interaction with Venus in a global hybrid model: the ion foreshock and the dynamics of the induced magnetosphere, AGU Fall Meeting, San Francisco, CA, Dec 2019.
455. Qusai Abdulla Al Shidi, Ofer Cohen, Jinnan Tu, Paul Song, Tuija I. Pulkkinen, Time-Dependent Two-Fluid Magnetohydrodynamic Model and Simulation of the Chromosphere, AGU Fall Meeting, San Francisco, CA, Dec 2019.
454. M. Alho, H. Nilsson, E. Kallio, C. Simon Wedlund, R. Järvinen, T.I. Pulkkinen, The Bow Shock at Comet 67P: Modelling Results of ICA Remote Sensing Observations, EGU General Assembly, Vienna, Austria, April 2019.
453. R. Jarvinen, M. Alho, E. Kallio, and T. I. Pulkkinen, Ion foreshock and dynamics of the induced magnetosphere of Venus in a global hybrid simulation, EPSC-DPS conference, Geneva, Switzerland, September 2019.
452. R. Jarvinen, M. Alho, E. Kallio, T. I. Pulkkinen, Global hybrid modeling of the solar wind interaction with Mercury: Ultra-low frequency waves in the foreshock, Physics Days, Annual meeting of the Physical Society of Finland, Helsinki, March 2019.
451. R. Jarvinen, M. Alho, E. Kallio, and T. I. Pulkkinen, The ion foreshock of Venus in a global hybrid simulation, EGU General Assembly, Vienna, Austria, April 2019.
450. M. Ala-Lahti, E. Kilpua, J. Soucek, T. Pulkkinen and A. Dimmock, Alfvén ion cyclotron waves in sheath regions driven by interplanetary coronal mass ejections, EGU General Assembly, Vienna, Austria, April 2019.

2018

449. T. I. Pulkkinen, A. Lakka, and A. P. Dimmock, Magnetosheath and Magnetopause Under Low Mach Number Conditions, AGU Fall Meeting, Washington DC, December 2018.
448. K. E. J. Kilpua, D. Turner, Allison, H. Hietala, H. E. J. Koskinen, M. Palmroth, T. I. Pulkkinen, R. Vainio, The response of the outer Van Allen radiation belt electron fluxes during complex solar wind drive, AGU Fall Meeting, Washington, DC, December 2018.
447. A. P. Dimmock, Adnane Osmane, E. Yordanova, Katariina Nykyri, Tuija Pulkkinen, The physical nature of the dawn-dusk asymmetry of magnetosheath ion temperature and its global implications: results from THEMIS and MMS. Cluster workshop, Chania, Greece, September 2018. Oral presentation.

- 446. Minna Palmroth, Sanni Hoilijoki, Liisa Juusola, Tuija Pulkkinen, Heli Hietala, Yann Pfau-Kempf, Urs Ganse, Sebastian von Alfthan, Rami Vainio, and Michael Hesse, Tail reconnection in the global magnetospheric context: Vlasiator first results, Cluster workshop, Chania, Greece, September 2018. Oral presentation.
- 445. Riku Jarvinen, Markku Alho, Esa Kallio, and Tuija I. Pulkkinen, Solar wind-magnetosphere interaction at Mercury during passage of coronal mass ejections, ESLAB symposium, on Comparative Aeronomy and Plasma Environment of Terrestrial Planets, Noordwijk, the Netherlands, June 2018. Poster presentation.
- 444. T. I. Pulkkinen, A. Lakka, A. Dimmock, E. Kilpua, Solar wind drivers in the magnetosheath: long-term evolution, COSPAR General Assembly, Pasadena, CA, July 2018. Oral presentation.
- 443. E. Kilpua, A. Balogh, R. von Steiger, Y. Liu, H. Koskinen, T. Pulkkinen, The Role of Solar Wind Interaction Regions and Fast Streams in Causing Space Weather at Earth, 15th Asia Oceania Geosciences Society Annual Meeting, Honolulu, US, June 2018. Oral presentation.
- 442. A. Lakka, T. I. Pulkkinen, A. P. Dimmock, E. Kilpua, M. Ala-Lahti, I. Honkonen, and M. Palmroth, CME impact at Earth with low and typical Mach number plasma characteristics, EGU General Assembly, Vienna, Austria, April 2018. Oral presentation.
- 441. R. Jarvinen, E. Kallio, M. Alho, T.I. Pulkkinen, Global hybrid simulations of the magnetosphere of Mercury, EGU General Assembly, Vienna, Austria, April 2018. Poster presentation.
- 440. M. Alho, H. Nilsson, E. Kallio, C. Simon Wedlund, R. Jarvinen, T. Pulkkinen, Remote Sensing of a Bow Shock at Comet 67P: ICA observations and Hybrid Modelling, EGU General Assembly, Vienna, Austria, April 2018. Poster presentation.
- 439. M. Ala-Lahti, E. Kilpua, A. Dimmock, A. Osmane, T. Pulkkinen, and J. Soucek, Statistical analysis of mirror mode waves in interplanetary coronal mass ejection-driven sheath regions, EGU General Assembly, Vienna, Austria, April 2018. Poster presentation.
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- 433. Palmroth, M., Hoilijoki, S., Pfau-Kempf, Y., Hietala, H., Nishimura, T., Angelopoulos, V., Pulkkinen, T. I., Ganse, U., Hannuksela, O., von Alfthan, S., and Vainio, R., Large-scale kinetic simulation of the magnetosphere. EGU General Assembly, Vienna, Austria, March 2016. Oral presentation.
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421. Adnane Osmane, Lynn B. Wilson III, Lauren Blum, Tuija I. Pulkkinen, On the connection between large-amplitude whistlers, microbursts and nonlinear electronic structures in the Earth's Radiation belts, AGU Fall Meeting, San Francisco, CA, Dec 2015. Poster presentation.

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- 416. A. P. Dimmock, K. Nykyri, T. I. Pulkkinen, A. Osmane, System science tool for the statistical mapping of the solar wind - magnetosheath - magnetospheric system, AGU Fall Meeting, San Francisco, CA, Dec 2014. Poster presentation.
- 415. K. Nykyri, A. P. Dimmock, X. Ma, T. I. Pulkkinen, The Missing Link Coupling the Foreshock to the Magnetosphere?: Impact of the Magnetosheath Velocity Fluctuations on the Growth of the Kelvin-Helmholtz instability, AGU Fall Meeting, San Francisco, CA, Dec 2014. Oral presentation.
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- 408. J. Praks, A. Kestila, M. Komu, S. Lan, O. Khurshid, O. Sami, T. Tikka, M. Oksman, A. Nasila, M. Hallikainen, T. Pulkkinen, H. Saari, P. Janhunen, R. Vainio, Aalto-1 nano satellite - building space technology and education in Finland, Finnish Physics Days, Joensuu, 2012.
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- 363. Tuija I. Pulkkinen, Ari Viljanen, and Eija Tanskanen, Auroral electrojets during deep solar minimum at the end of solar cycle 23, AGU Fall Meeting, San Francisco, CA, USA, 2009. Oral presentation.
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139. I. Sandahl, A. T. Y. Lui, T. Pulkkinen, H. Koskinen, A. Mälkki, E. Yu. Budnik, T. J. Hughes, S. Kokubun, R. P. Lepping, R.P. Lin, T. Mukai, S. Romanov, J.-A. Sauvaud, T. Yamamoto, Observations of plasma sheet thinning during stormtime substorms, COSPAR, 1997. Oral presentation.
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135. J. F. Fennell, J. L. Roeder, M. W. Chen, W. K. Peterson, K. J. Trattner, T. I. Pulkkinen, T. A. Fritz, R. Sheldon, M. Grande, C. Perry, S. Livi, Multiple discrete ion features in the inner magnetosphere: Polar CAMMICE observations, American Geophysical Union Spring Meeting, 1998. Oral presentation.
134. D. N. Baker, T. I. Pulkkinen, X. Li, H. E. Spence, G. D. Reeves, J. B. Blake, and W. K. Peterson, Substorm particle and field changes during geomagnetic storms: cause and effect relationships, American Geophysical Union Spring Meeting, 1998. Oral presentation.
133. N. E. Turner, D. N. Baker, T. I. Pulkkinen, J. F. Fennel, J. Roeder, and T. A. Fritz, Estimation of ring current energy deposition, American Geophysical Union Spring Meeting, 1998. Poster presentation.

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131. H. E. J. Koskinen and T. I. Pulkkinen, Space weather: Why are magnetospheric physicists interested in solar explosive phenomena, CESRA (Community of European Solar Radio Astronomers) Workshop on Coronal explosive events, June 1998, Espoo, Finland. Poster presentation.
130. V. A. Sergeev, J.-A. Sauvaud, R. A. Kovrazhkin, V. N. Lutsenko, L. M. Zelenyi, M. Syrjäsoo, T. I. Pulkkinen, K. Kudela, K. Liou, C.-I. Meng, and G. D. Reeves, Impulsive activity near the poleward edge of expanding auroral bulge on December 22, 1996: Interball-ground correlation study. ISTP-Interball workshop, Kosice, Slovakia, September 1998.
129. A. Pajunpaa, M. Syrjasuo, P. Janhunen, T. I. Pulkkinen, A. Viljanen, and E. Nielsen, Brightening of the poleward border of the diffuse auroral luminosity near the magnetic midnight. XXV annual European meeting on atmospheric studies by optical methods, Istitute de Astrofisca de Andalucia, CSIC, Granada, Spain, September 1998. Oral presentation.
128. T. Pulkkinen, P. Janhunen ja P. Toivanen, Maapallon lähiavaruuden mallinnus IL/GEO:lla: Sovelluksena avaruussää. Suomen avaruustutkijoiden kokous 14-15.9. 1998, Kiljava, Finland. Oral presentation.
127. P. K. Toivanen, T. I. Pulkkinen, H. E. J. Koskinen, R. H. W. Friedel, G. D. Reeves, A. Korth, and C. Mouikis, On modelling of energetic particle distributions in the Earth's inner magnetosphere. Suomen avaruustutkijoiden kokous 14-15.9. 1998, Kiljava, Finland. Poster presentation.
126. A. Pajunpaa, A. Viljanen ja T. Pulkkinen, Olosuhteista, jotka vallitsivat lähiavaruudessa tietoliikennesatelliitti ANIKin tuhoutumista edeltävällä viikolla, Suomen avaruustutkijoiden kokous 14-15.9. 1998, Kiljava, Finland.
125. P. Janhunen, P. K. Toivanen, T. I. Pulkkinen, and H. E. J. Koskinen, Space weather-related magnetospheric modeling at FMI/GEO, ESA workshop on space weather, Nov 1998, ESTEC, Noordwijk, the Netherlands. Poster presentation.
124. N. E. Turner, D. N. Baker, T. I. Pulkkinen, G. Lu, J. F. Fennell, J. Roeder, and T. A. Fritz, Stormtime energy deposition: Ring current and Joule heating, AGU Fall meeting 1998. Oral presentation.
123. M. Wiltberger, C. Goodrich, R. E. Lopez, T. I. Pulkkinen, The December 10, 1996 Substorm: A case study of energy storage and release in global MHD simulations, AGU Fall meeting 1998. Poster presentation.
122. H. Nevanlinna, P. J. Pulkkinen, and T. I. Pulkkinen, Dependence of geomagnetic activity on heliographic latitude of sunspots, AGU Fall meeting 1998. Poster presentation.
121. M. V. Uspensky, H. Opgenoorth, P. Eglitis, G. V. Starkov, and T. I. Pulkkinen, The eveningside equatorward edge of the diffuse luminosity belt: The Finland CUTLASS radar monitoring, NORDUNI-98 conference, Oulu University, November 19-20, 1998. Poster presentation.

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119. D. N. Baker and T. I. Pulkkinen, Magnetic reconnection during magnetospheric substorms, AGU Spring Meeting, 1997. Invited oral presentation.
118. D. N. Baker, X. Li, T. I. Pulkkinen, R. Selesnick, M. G. Henderson, and G. D. Reeves, Coronal mass ejections, magnetic clouds, and relativistic magnetospheric electron events, AGU Spring Meeting, 1997.
117. N. E. Turner, D. N. Baker, T. I. Pulkkinen, H. J. Singer, N. Maynard, F. Mozer, R. P. Lepping, K. Ogilvie, T. A. Fritz, and T. Mukai, Multi-spacecraft analysis of electric field coupling between the solar wind and the magnetosphere: ISTP, AGU Spring Meeting, 1997.

116. T. I. Pulkkinen, D. N. Baker, L. A. Frank, J. B. Sigwarth, S. G. Kanekal, and T. Onsager, Effects of the Sun to the Earth's particle environment: Particle precipitation boundaries and UV oval images compared. 8th Scientific Assembly of IAGA, Uppsala, Sweden, August, 1997. Oral presentation.
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114. M. T. Syrjasuo, T. I. Pulkkinen, K. Kauristie, A. Viljanen, R. J. Pellinen, H. E. J. Koskinen, J. D. Craven, L. A. Frank, and J. B. Sigwarth, Comparison of ground-based and satellite images of the discrete auroral oval, 8th Scientific Assembly of IAGA, Uppsala, Sweden, August, 1997. Poster presentation.
113. K. Kauristie, M. Syrjäsuo, T.I. Pulkkinen, H. J. Opgenoorth, and R. J. Pellinen, A case study on omega-like auroral structures during the substorm expansion phase, 8th Scientific Assembly of IAGA, Uppsala, Sweden, August, 1997. Poster presentation.
112. P. K. Toivanen, H. E. J. Koskinen, T. I. Pulkkinen, Mapping of the magnetospheric electric field: Effects of parallel and inductive components, 8th Scientific Assembly of IAGA, Uppsala, Sweden, August, 1997. Oral presentation.
111. K. Kauristie, V. A. Sergeev, A. Huuskonen, A. Pajunpää, T. I. Pulkkinen, R. L. Lin, and T. Phan, Do the plasma sheet bubbles have their footpoints in the ionosphere?, 8th Scientific Assembly of IAGA, Uppsala, Sweden, August, 1997. Oral presentation.
110. J. Weygand, J. S. Murphree, K. Kauristie, T. I. Pulkkinen, M. Syrjasuo, P. T. Newell, Size of the auroral oval: UV-ovals and precipitation boundaries compared, 8th Scientific Assembly of IAGA, Uppsala, Sweden, August, 1997. Oral presentation.
109. M. V. Kubyshkina, V. A. Sergeev, and T. I. Pulkkinen, Characteristics of cross-tail current before the substorm onset as deduced from empirical hybrid models, 8th Scientific Assembly of IAGA, Uppsala, Sweden, August, 1997. Poster presentation.
108. N. E. Turner, D. N. Baker, T. I. Pulkkinen, H. J. Singer, N. Maynard, F. Mozer, R. P. Lepping, K. Ogilvie, T. A. Fritz, and T. Mukai, Coordinated ISTP statistical study of electric field coupling between the solar wind and the magnetosphere, 8th Scientific Assembly of IAGA, Uppsala, Sweden, August, 1997. Oral presentation.
107. G. Lu, G. L. Siscoe, T. I. Pulkkinen, N. A. Tsyganenko, H. J. Singer, and B. A. Emery, Mapping of the ionospheric field-aligned currents to the equatorial magnetosphere, 8th Scientific Assembly of IAGA, Uppsala, Sweden, August, 1997. Oral presentation.
106. H. Laakso, H. Koskinen, T. Pulkkinen, R. Grard, Electric Current Systems in the Mercury Magnetosphere, AGU Fall Meeting, 1997. Oral presentation.
105. D. N. Baker, T. I. Pulkkinen, J. Buechner, A. J. Klimas, Substorms: A global magnetospheric instability, AGU Fall Meeting, 1997. Oral presentation.
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103. N. E. Turner, D. N. Baker, T. I. Pulkkinen, R. L. McPherron, Evaluation of the tail current contribution to the Dst index, AGU Fall Meeting, 1997. Oral presentation.
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101. A. Malkki, H. E. Koskinen, T. I. Pulkkinen, I. Sandahl, E. Y. Budnick, A. Fedorov, Dispersive Ion Injections at High Latitudes Between 16-21 MLT Observed by Interball Auroral Probe During January 1997 Magnetic Cloud Event, AGU Fall Meeting, 1997. Oral presentation.
100. M. T. Syrjasuo, T. I. Pulkkinen, K. Kauristie, J. D. Craven, U. Brandstrom, A. Steen, L. A. Frank, J. B. Sigwarth, Comparison of ground-based and satellite observations of the aurora, AGU Fall Meeting, 1997. Poster presentation.

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98. H. J. Opgenoorth, S. B. Karlsson, K. Kauristie, M. Syrjasuo, A. Huuskonen, T. Pulkkinen, M. Lockwood, R. Greenwald, P. Eglitis, J. P. Villain, G. Sofko, R. Nakamura, G. Reeves, M. Nozdrachev, Coordinated Multipoint Observations of a Solar Wind Controlled Double Substorm Onset: The Quenching of Substorm Expansion, AGU Fall Meeting, 1997. Poster presentation.

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96. H. E. J. Koskinen, P. K. Toivanen, and T. I. Pulkkinen, Parallel electric fields during the substorm growth phase, 3rd International Conference on Substorms, Versailles, France, May 1996. Poster presentation.
95. A. Viljanen, K. Kauristie, T. Pulkkinen, R. Pellinen, H. Opgenoorth, and M. Persson, Study of double electrojets using a long magnetometer chain, 3rd International Conference on Substorms, Versailles, France, May 1996. Poster presentation.
94. P. Janhunen, H. E. J. Koskinen, and T. I. Pulkkinen, A new global ionosphere-magnetosphere coupling simulation utilizing locally varying time step, 3rd International Conference on Substorms, Versailles, France, May 1996. Poster presentation.
93. K. Kauristie, T. I. Pulkkinen, R. J. Pellinen, and H. J. Opgenoorth, An improved AE index?, 3rd International Conference on Substorms, Versailles, France, May 1996. Poster presentation.
92. K. Kauristie, V. A. Sergeev, T. I. Pulkkinen, R. J. Pellinen, V. Angelopoulos, and W. Baumjohann, Study on the ionospheric signatures of the plasma sheet bubbles, 3rd International Conference on Substorms, Versailles, France, May 1996. Poster presentation.
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90. R. J. Pellinen, T. I. Pulkkinen, and K. Kauristie, Hakone - Kiruna - Fairbanks - Versailles (1990-1996): Has the signal to noise ratio improved in substorm physics?, 3rd International Conference on Substorms, Versailles, France, May 1996. Invited oral presentation.
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83. H. E. J. Koskinen and T. I. Pulkkinen, Time-evolving magnetic field modeling at geostationary distances, Conference on Space Weather, ESTEC, September, 1996. Oral presentation.
82. D. N. Baker, A. Nishida, T. Mukai, T. Yamamoto, Y. Saito, Y. Matsuno, S. Kokubun, and T. I. Pulkkinen, Observations of bidirectional electrons in the distant tail lobes: GEOTAIL results, Chapman Conference on The Earth's Magnetotail: New perspectives, Nov 5-9, 1996, Kanazawa, Japan. Oral presentation.
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78. K. Kauristie, T. I. Pulkkinen, D. N. Baker, N. Turner, L. A. Frank, J. B. Sigwarth, H. Singer, T. A. Fritz, J. B. Blake, G. D. Reeves, S. Kokubun, R. Nakamura, and C. T. Russell, Multispacecraft Study of Solar Wind - Magnetosphere Coupling During an Isolated Substorm Event, AGU Fall Meeting, 1996. Oral presentation.
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71. R. Pellinen, K. Kauristie, T. Pulkkinen, and A. Viljanen, Ground-based tools for monitoring the magnetic activity, Second International workshop for the coordination of ground-based observations and Cluster, Rome, Italy, April 1995. Oral presentation.
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- 68. T. I. Pulkkinen, D. N. Baker, C. J. Owen, and J. A. Slavin, A magnetic field model for the distant geomagnetic tail, XXI General Assembly of IUGG, Boulder, CO, July 1995. Oral presentation.
- 67. K. Kauristie, T. I. Pulkkinen, R. J. Pellinen, Monitoring the auroral electrojet with the global AE chain and with a local meridional magnetometer chain, XXI General Assembly of IUGG, Boulder, CO, July 1995. Poster presentation.
- 66. K. Kauristie, T. I. Pulkkinen, R. J. Pellinen, D. N. Baker, H. J. Opgenoorth, and W. J. Heikkila, Analysis of the substorm trigger phase using ground-based and satellite observations, XXI General Assembly of IUGG, Boulder, CO, July 1995. Poster presentation.
- 65. P. Janhunen, T. I. Pulkkinen, and H. E. J. Koskinen, Simulating semiglobal magnetosphere-ionosphere coupling with applications to auroral phenomena, XXI General Assembly of IUGG, Boulder, CO, July 1995. Poster presentation.
- 64. D. N. Baker, T. I. Pulkkinen, A. Nishida, M. Hesse, and R. L. McPherron, A possible interpretation of cold ion beams in the Earth's tail lobes, XXI General Assembly of IUGG, Boulder, CO, July 1995. Oral presentation.
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- 62. K. Kauristie, R. J. Pellinen, T. I. Pulkkinen, and A. Viljanen, Substorm trigger phase, The 22nd annual European meeting on atmospheric studies by optical methods, Nurmijarvi, Finland, Aug 28 - Sept 1, 1995. Oral presentation.
- 61. P. K. Toivanen, T. I. Pulkkinen, and H. E. J. Koskinen, Effects of the large-scale electric field on particle drifts, EOS Transactions, 76, No 46, 498, 1995. Oral presentation.
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- 58. K. Kauristie, T. I. Pulkkinen, and R. J. Pellinen, Statistical auroral oval model for substorm studies. International Conference on Substorms, Fairbanks, Alaska, 1994. Poster presentation.
- 57. T. I. Pulkkinen, V. A. Sergeev, P. K. Toivanen, and R. J. Pellinen, What can we learn about substorms by studying steady convection events? International Conference on Substorms, Fairbanks, Alaska, 1994. Poster presentation.
- 56. M. Hesse, J. Birn, D. N. Baker, and T. I. Pulkkinen, MHD simulations of substorm dynamics including an inner magnetotail. International Conference on Substorms, Fairbanks, Alaska, 1994. Oral presentation.
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- 54. R. J. Pellinen, T. I. Pulkkinen, and K. Kauristie, Have we learned enough about auroral substorm morphology during the past 30 years? International Conference on Substorms, Fairbanks, Alaska, 1994. Invited oral presentation.
- 53. H. J. Opgenoorth, M. A. L. Persson, P. K. Toivanen, and T. I. Pulkkinen, Near Earth substorm onset: The possible role of ion outflows during the substorm growth phase. International Conference on Substorms, Fairbanks, Alaska, 1994. Invited oral presentation.
- 52. K. Kauristie, T. Pulkkinen, and R. Pellinen, Statistical auroral oval model for substorm studies, XXVIII annual conference of the Finnish Physical Society, Järvenpää, Finland, March 17-19, 1994. Poster presentation.

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50. K. Kauristie, T. I. Pulkkinen and R. J. Pellinen, Dynamics of the auroral oval during substorms - A statistical study. The 21st annual European meeting on atmospheric studies by optical methods, London, Sept. 16-21, 1994. Poster presentation.
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