Curriculum Vitae

Name: Dong Lin **Email:** ldong@ucar.edu *(Updated on 24 Sep 2024)*

Education

VIRGINIA TECH (VT) 08/2015-05/2019
Ph.D. in Electrical Engineering (Advisor: Dr. Wayne Scales)

UNIVERSITY OF NEW HAMPSHIRE (UNH) 09/2014-05/2015
Ph.D. student in Space Physics

UNIVERSITY OF CHINESE ACADEMY OF SCIENCES (UCAS) 09/2011-07/2014
M.S. in Space Physics (Advisor: Dr. Chi Wang)

UNIVERSITY OF SCIENCE AND TECHNOLOGY OF CHINA (USTC) 09/2007-07/2011
B.S. in Space Physics

Employment

High Altitude Observatory, NCAR	Project Scientist I	01/2022 - *present*
High Altitude Observatory, NCAR	ASP Postdoc Fellow	06/2019-01/2022

Research Grants

PI of NASA Heliophysics Early-Career Investigator Program Award, total amount $699,797. 2023-2027

Co-I of NASA Phase II DRIVE Science Centers Award "Center for Geospace Storms (CGS)", total amount $14,999,571. 2022-2027

Co-I of NASA Heliophysics Supporting Research Award "An examination of magnetosphere-ionosphere coupling during STEVE and SAID", total amount $691,320. 2022-2025

Co-I of NASA Heliophysics Supporting Research Award "Energy Budget of ULF Waves in the Solar Wind-Magnetosphere-Ionosphere System", total amount $697,557. 2021-2024

Co-I of NASA Living With a Star Award "Impact of Thermospheric Asymmetry On Geospace Coupling", total amount $936,609. 2020-2024

Co-I of NASA Community Coordinated Modeling Center Award "Implementation and validation of NCAR WACCM-X on Pleiades and TIEGCM on AWS for CCMC: Phase III", total amount $99,999. 2022-2023

Awards & Honors

NCAR	Advanced Study Program's Postdoctoral Fellowship	06/2019-06/2021
VT	Graduate School Scholarship	08/2015-05/2019
HAO	Graduate Visitor Fellowship	05/2018-08/2018
NCAR	Advanced Study Program's Graduate Student Fellowship	05/2017-08/2017
NSF/GEM	Present the Best Magnetotail and Plasma Sheet Poster	06/2017
LANL	Vela Fellowship	07/2015
UCAS	Outstanding Student Scholarship	06/2013
UCAS	Research Practice Award for Undergraduates	09/2012

Professional Experience

- NASA Living with a Star Program Analysis Group Executive Committee — 2024-present
- NCAR Early Career Leadership Program — 2023
- **Working Group Lead**: NASA DRIVE Science Center for Geospace Storms Precipitation and Conductance — 2022-present
- **Panelist** for NASA and NSF — 2022-2023
- **Convener and Chair**: AGU Fall Meetings, GEM Workshop Focus Group, CEDAR Workshop — 2019-present
- **Peer Reviewer**: Geophysical Research Letter, Journal of Geophysical Research: Space Physics, Space Weather, Earth and Space Science, Journal of Atmospheric and Solar-Terrestrial Physics, Advances in Space Research — 2017-present
- **Institutional Meeting Organizers**: HAO Colloquium, HAO Geospace Frontier Tea Meeting, NCAR Postdoc Research Review Meeting — 2019-present
- **Judges**: AGU OSPA, GEM Poster competition — 2021-present
- **Summer Schools**: 2016 International Incoherent Scatter Radar School, 2015 NASA LWS Heliophysics Summer School, 2015 LANL Space Weather Summer School. — 2015-2016
- **Graduate teaching assistant** at VT, UNH, UCAS. — 2012-2016
- **Volunteer**: VT Partnering with Educators and Engineers in Rural Schools Program. — 2018-2019

Research Experience

NCAR/HAO **Project Scientist I** Advisor: Dr. Wenbin Wang 01/2022-*present*
- Auroral precipitation modeling and its effects in the ionosphere-thermosphere (NASA ECIP).
- Multiscale Atmosphere-Geospace Environment model development (NASA DRIVE Science Center).
- Ionosphere-thermosphere (IT) dynamics (SAPS, PEF, IH asymmetry, etc.) in MIT coupling (NASA LWS).
- Magnetospheric ULF waves in the energy budget of the coupled MI (NASA HSR).
- An examination of MI coupling during STEVE and SAID (NASA HSR).

NCAR/HAO **ASP Postdoctoral Fellow** Advisor: Dr. Wenbin Wang 06/2019-01/2022
- Electron precipitation characterization in the MAGE model.
- Subauroral polarization streams modeling study.
- Installation and testing of TIEGCM/WACCM-X on NASA CCMC platforms.

VT **PhD Dissertation Research** Supervisor: Dr. Wayne Scales 08/2015-05/2019
- Multiscale computational modeling of solar wind-magnetosphere-ionosphere (SW-M-I) coupling.
- Particle-in-cell (PIC) simulation of the Electron-Ion Hybrid (EIH) instability at dipolarization fronts.
- Guiding center PIC simulation of the inhomogeneous energy density driven instability (IEDDI).

NCAR/HAO **Visitor Program** Mentor: Dr. Wenbin Wang 05/2018-08/2018
- Development and test of LFM-TIEGCM-RCM (LTR) global MIT model.
- LTR simulation of the Sub-Auroral Polarization Streams (SAPS) on 2013-Mar-17.
- Comparison of the global simulation results of SAPS with the DMSP observations.

NCAR/HAO **Advanced Study Program** Mentor: Dr. Michael Wiltberger 05/2017-08/2017
- LFM global MHD simulation of the solar wind-magnetosphere-ionosphere coupling.
- Cross polar cap potential response under extreme driving conditions.
- Magnetopause reconnection potential under idealized solar wind conditions.

VT **Graduate Research Assistant** Mentor: Dr. Zhonghua Xu 01/2017-05/2017
- Develop Multiple Observatory Geomagnetic Data Analysis Software (MOGDAS). 05/2016-08/2016
- MOGDAS processing AAL-PIP, DTU, and SHMS ground magnetometer data.
- Automated Lomb-Scargle algorithm for ULF wave detection in SuperDARN data.

Los Alamos National Laboratory **Student Visitor** Mentor: Dr. Misa Cowee 06/2015-07/2015
- Hybrid simulation study of heavy ion effects on KH instability.
- KH instability growth rate dependence on ion mass.
- OpenMP parallelization for high performance computation.

UCAS **Master Thesis Research** Supervisor: Dr. Chi Wang 03/2011-07/2014
- Statistical study of KH waves on the Earth's magnetopause.
- KH wave property analysis with data of THEMIS, Cluster, Geotail, and TC1.
- Magnetopause crossing data analysis of Double Star TC-1.

Publications

1. **Lin, D.**, W. Wang, M. C. Fok, K. Pham, J. Yue, and H. Wu (2024), SubAuroral Red Arcs Generated by Inner Magnetospheric Heat Flux and by SubAuroral Polarization Streams, ***Geophys. Res. Lett.,*** *51*, doi: 10.1029/e2024GL109617.

2. **Lin, D.**, W. Wang, V. Merkin, C. Huang, M. Oppenheim, and K. Sorathia, et al. (2022), Origin of Dawnside Subauroral Polarization Streams during Major Geomagnetic Storms, ***AGU Advances****, 3*, doi: 10.1029/2022AV000708. *(EOS highlight).*

3. **Lin, D.**, Wang, W., Garcia-Sage, K., Yue, J., Merkin, V. G., and McInerney, J. M., et al. (2022), Thermospheric Neutral Density Variation during the "SpaceX" Storm: Implications from Physics-based Whole Geospace Modeling, ***Space Weather****, 20*, doi: 10.1029/2022SW003254.

4. Shi, X., **Lin, D.***, Wang, W., Baker, J. B. H., Weygand, J. M., Hartinger, M. D., et al. (2022), Geospace concussion: Global reversal of ionospheric vertical plasma drift in response to a sudden commencement, ***Geophys. Res. Lett.,*** *49*, doi: 10.1029/2022GL100014. *(Corresponding author).*

5. **Lin, D.**, K. Sorathia, W. Wang, V. Merkin, S. Bao, and K. Pham et al. (2021), The role of diffuse electron precipitation in the formation of subauroral polarization streams, ***J. Geophys. Res.,*** *126*, e2021JA029792, doi: 10.1029/2021JA029792.

6. **Lin, D.**, W. Wang, W. A. Scales, K. Pham, J. Liu, and B. Zhang et al. (2019), SAPS in the 2013 March 17 Storm Event: Initial Results from the Coupled Magnetosphere-Ionosphere-Thermosphere Model, ***J. Geophys. Res. Space Phys.,*** *124* (7), 6212-6225, doi:10.1029/2019JA026-698.

7. **Lin, D.**, W. A. Scales, G. Ganguli, X. Fu, C. Crabtree, and E. Tejero et al. (2019), A New Perspective for Dipolarization Front Dynamics: Electromagnetic Effects of Velocity Inhomogeneity, ***J. Geophys. Res. Space Phys.,*** *124* (9), 7533-7542, doi:10.1029/2019JA026815.

8. **Lin, D.**, W. A. Scales, and S. Sen, (2019), Flow curvature effects on the parallel velocity shear driven instability: MHD simulations. ***Radiat. Eff. Defect. S.,*** *174* (7-8), 691-696, doi: 10.1080/10420150.2019.1639053.

9. **Lin, D.**, B. Zhang, W. A. Scales, M. Wiltberger, C. R. Clauer, and Z. Xu (2017), The Role of solar wind density in cross polar cap potential saturation under northward interplanetary magnetic field, ***Geophys. Res. Lett.*** *44* (23), 11,729-11,734, doi:10.1002/2017GL075275.

10. **Lin, D.**, W. A. Scales, and S. Sen, (2017), Flow curvature effects on the Kelvin–Helmholtz instability: hybrid simulation. ***Radiat. Eff. Defect. S.,*** *172* (9-10), 750-753, doi: 10.1080/10420150.2017.1398254.

11. **Lin, D.**, C. Wang, W. Li, and B. Tang (2015), Determination of the Kelvin-Helmholtz Wave Parameters on the Magnetopause in Single-spacecraft Observations, ***Chin. J. Space Sci.*** *35 (4),* 403-408, doi: 10.11728/cjss2014.04.403.

12. **Lin, D.**, C. Wang, W. Li, B. Tang, X. Guo, and Z. Peng (2014), Properties of Kelvin-Helmholtz waves at the magnetopause under northward interplanetary magnetic field: Statistical study, ***J. Geophys. Res. Space Phys.,*** *119* (9), 7485-7494, doi:10.1002/2014JA020379.

13. Sorathia, K., M. Shunko, A. Sciola, A. Michael, V. G. Merkin, B. Gallardo-Lacourt, M. G. Henderson, and **D. Lin** et al., (2024). Identifying the magnetospheric drivers of giant undulations: Global modeling of the evolving inner magnetosphere and its auroral manifestations. ***Geophys. Res. Lett.,*** *51 (16)*, doi: 10.1029/2024GL110772.

14. Wu, Q., W. Wang, and **D. Lin** et al., (2024). MAGE model simulation of the pre-reversal enhancement and comparison with ICON and Jicamarca ISR observations. ***J. Geophys. Res.,*** *129 (6)*, doi: 10.1029/2023JA032038.

15. Wu, Q., **D. Lin** and W. Wang et al., (2024). HIWIND Balloon and Antarctica Jang Bogo FPI High Latitude Conjugate Thermospheric Wind Observations and Simulations. ***J. Geophys. Res.,*** *129 (6)*, doi: 10.1029/2023JA032400.

16. Albarran, R. M., R. H. Varney, K. Pham and **D. Lin** (2024). Characterization of N+ Abundances in the Terrestrial Polar Wind Using the Multiscale Atmosphere-Geospace Environment. ***J. Geophys. Res.,*** *129 (5)*, doi: 10.1029/2023JA032311.

17. Madelaire, M., K. Laundal, S. Hatch, H. Vanhamaki, J. Reistad, A. Ohma, V. Merkin and **D. Lin** (2024). Estimating the ionospheric induction electric field using ground magnetometers. ***Geophys. Res. Lett.,*** *51 (8)*, doi: 10.1029/2023GL105443.

18. Wu, Q., W. Wang, and **D. Lin** et al., (2024). Penetrating electric field during the Nov 3–4, 2021 geomagnetic storm. ***J. Atmos. Solar Terr. Phys.*** *, 257, 106219*, doi: 10.1016/j.jastp.2024.106219.

19. Cao, X., X. Chu, S. Hsu, H. Cao, W. Sun, L. Liuzzo, J. Halekas, C. Paty, F. Chu, O. Agiwal, L. W. Blum, F. Crary, I. J. Cohen, P. Delamere, M. Hofstadter, G. Hospodarsky, J. Cooper, P. Kollmann, E. Kronberg, W. Kurth, L. Lamy, and **D. Lin** et al., (2024). Science Return of Probing Magnetospheric Systems of Ice Giants. ***Front. in Astro. and Space Sci.,*** *11, 123705*, doi: 10.3389/fspas.2024.1203705.

20. Bao, S., W. Wang, K. Sorathia, V. G. Merkin, F. Toffoletto, and **D. Lin** et al., (2023). The relation among the ring current, subauroral polarization stream, and the geospace plume: MAGE Simulation of the March 31 2001 Super Storm. ***J. Geophys. Res.: Space Physics***, 128. doi: 10.1029/2023JA031923.

21. Kakoti, G., M. S. Bagiya, F. I. Laskar, and **D. Lin**, (2023). Unveiling the combined effects of neutral dynamics and electrodynamic forcing on dayside ionosphere during the 3–4 February 2022 "SpaceX" geomagnetic storms. ***Scientific Reports***, 13, 18932. doi: 10.1038/s41598-023-45900-y.

22. Sciola, A., V. G. Merkin, K. Sorathia, M. Gkioulidou, B. Bao, F. Toffoletto, K. Pham, and **D. Lin** et al., (2023). The Contribution of Plasma Sheet Bubbles to Stormtime Ring Current Buildup and Evolution of Its Energy Composition. ***J. Geophys. Res.: Space Physics***, 128. doi: 10.1029/2023JA031693.

23. Sorathia, K., A. Michael, V. G. Merkin, S. Ohtani, A. M. Keesee, A. Sciola,, and **D. Lin** et al., (2023). Multiscale Magnetosphere-Ionosphere Coupling During Stormtime: A Case Study of the Dawnside Current Wedge. ***J. Geophys. Res.: Space Physics***, 128. doi: 10.1029/2023JA031594.

24. He, J., E. Astafyeva, X. Yue, N. M. Pedatella, **D. Lin**, T. J. Fuller-Rowell et al. (2023). Comparison of empirical and theoretical models of the thermospheric density enhancement during the 3-4 February 2022 geomagnetic storm. ***Space Weather,*** *21*, e2023SW003521. doi: 10.1029/e2023SW003521.

25. Chen, J., B. Zhang, **D. Lin**, P. Delamere, and Z. Yao et al. (2023). Prediction of Axial Asymmetry in Jovian Magnetopause Reconnection. ***Geophys. Res. Lett.***, doi: 10.1029/2022GL102577.

26. Cai, X., Wang, W., **D. Lin**, Eastes, R. W., Qian, L., Zhu, Q., et al. (2023). Investigation of the Southern Hemisphere mid-high latitude thermospheric $\Sigma O/N_2$ responses to the Space-X storm. ***J. Geophys. Res.: Space Physics,*** *128*, e2022JA031002. doi: 10.1029/2022JA031002.

27. Laskar, F. I., Sutton, E. K., **D. Lin**, Greer, K. R., Aryal, S., Cai, X., et al. (2023). Thermospheric temperature and density variability during 3–4 February 2022 minor geomagnetic storm. ***Space Weather,*** *21*, e2022SW003349. doi: 10.1029/2022SW003349.

28. Huang, C.-S., Zhang, Y., Wang, W., Wu, Q., **D. Lin**, and Qian, L. (2023). Ionospheric oscillations with a quasi-period of ∼6 hr during intense magnetic storms. ***J. Geophys. Res.: Space Physics****, 128*, e2022JA031117. doi: 10.1029/2022JA031117.

29. Cai, Y., X. Yue, W. Wang, SR. Zhang, HX. Liu, and **D. Lin** et al. (2022). Altitude extension of the NCAR-TIEGCM (TIEGCM-X) and evaluation. ***Space Weather****, 20*, doi: 10.1029/2022SW003227.

30. Wu, Q., **D. Lin**, and W. Wang et al. (2022). Thermospheric Wind Observation and Simulation during the Nov 4, 2021 Geomagnetic Storm Event. ***J. of Astro. Space Sci.****, 9*, doi: 10.5140/JASS.2022.39.3.79.

31. Wu, Q., W. Wang, **D. Lin**, and Y. Zhang et al. (2022). Penetrating electric field simulated by the MAGE and comparison with ICON observation. ***J. Geophys. Res.: Space Physics****, 127*, doi: 10.1029/2022JA030467.

32. Huang, C.-S., Zhang, Y., Wang, W., Wu, Q., and **D. Lin** (2022). Continuous enhancements of electron temperature in the subauroral ionosphere over eight days during the 2015 St. Patrick's day storm, ***J. Geophys. Res.: Space Physics****, 127*, doi: 10.1029/2022JA030629.

33. Huang, C.-S., Zhang, Y., Wang, W., **D. Lin**, and Wu, Q. (2022). Behaviors of ionospheric topside ion density, ion temperature, and electron temperature during the 20 November 2003 superstorm, ***J. Geophys. Res.: Space Physics****, 127*, doi: 10.1029/2022JA030468.

34. Pham, K., B. Zhang, K. Sorathia, T. Dang, W. Wang, V. Merkin, H. Liu, and **D. Lin** et al. (2022), Thermospheric density perturbations produced by traveling atmospheric disturbances during August 2005 storm, ***J. Geophys. Res.: Space Physics****, 127*, doi: 10.1029/2021JA030071.

35. Chen, X., T. Dang, B. Zhang, W. Lotko, K. Pham, W. Wang, and **D. Lin**, et al. (2021). Global effects of a polar solar eclipse on the coupled magnetosphere-ionosphere system. ***Geophys. Res. Lett.*** *48*, e2021GL096471, doi: 10.1029/2021GL096471.

36. Huang, CS, Y. Zhang, W. Wang, **D. Lin**, and Q. Wu, (2021), Low-Latitude Zonal Ion Drifts and Their Relationship with Subauroral Polarization Streams and Auroral Return Flows during Intense Magnetic Storms, ***J. Geophys. Res.: Space Physics****, 126*, e2021JA030001, doi: 10.1029/2021JA030001.

37. Zhai, C., X. Shi, W. Wang, M. D. Hartinger, Y. Yao, W. Peng, and **D. Lin** et al. (2021), Characterization of High-m Poloidal ULF Wave Signatures in GPS TEC Data, ***Geophys. Res. Lett.****, 48* (14), doi: 10.1029/2021GL094282.

38. Zhang, B., P. Delamere, Z. Yao, B. Bonfond, **D. Lin**, and K. Sorathia et al. (2021), How Jupiter's Unusual Magnetospheric Topology Structures Its Aurora, ***Science Advances****, 7* (15), doi: 10.1126/sciadv.abd1204.

39. Peng, Y., W. A. Scales, and **D. Lin**, (2020), GNSS-based hardware-in-the-loop Simulations of Spacecraft Formation Flying with the Global Ionospheric Model TIEGCM, ***GPS Solutions****, 25* (2), 1-14, doi: 10.1007/s10291-021-01099-x.

40. Nykyri, K., X. Ma, B. Burkholder, R. Rice, J. Johnson, E. H. Kim, P. Delamere, A. Michael, K. Sorathia, and **D. Lin** et al. (2020), MMS Observations of the Multi-Scale Wave Structures and Parallel Electron Heating in the Vicinity of the Southern Exterior Cusp, ***J. Geophys. Res. Space Phys.****, 126* (3), doi: 10.1029/2019JA027698.

41. Shi, X., M. D. Hartinger, J. B. H. Baker, J. M. Ruohoniemi, **D. Lin**, and Z. Xu et al. (2020), Multipoint Conjugate Observations of Dayside ULF Waves during an Extended Period of Radial IMF, ***J. Geophys. Res. Space Phys.****, 125* (11), doi: 10.1029/2020JA028364.

42. Wilder, F., R. Lopez, S. Eriksson, K. Pham, and **D. Lin** (2019), The Relative Importance of Geoeffective Length Versus Alfvèn Wing Formation in the Saturation of the Ionospheric Reverse Convection Potential. ***Geophys. Res. Lett.****, 46*, (3), 1126-1131, doi: 10.1029/2018GL080639.

43. Xu, Z., M. Hartinger, R. Clauer, D. Weimer, K. Deshpande, H. Kim, S. Musko, A. Willer, T. Edwards, S. Coyle, Y. Peng, **D. Lin**, and J. Bowman (2019), Newly established autonomous adaptive low-power instrument platform (AAL-PIP) chain on East Antarctic Plateau and operation. ***Advances in Polar Science****, 4* (3), doi: 10.13679/.advps.2019.0028.

44. Liu, J., W. Wang, B. Zhang, C. Huang, and **D. Lin** (2018), Temporal Variation of Solar Wind in Controlling Solar Wind-Magnetosphere-Ionosphere Energy Budget, ***J. Geophys. Res. Space Phys.,*** *123* (7), 5862-5869, doi: 10.1029/2017JA025154.

45. Shi, X., J. M. Ruohoniemi, J. B. H. Baker, and **D. Lin** et al. (2018), Survey of ionospheric Pc3-5 ULF wave signatures in SuperDARN high time resolution data. ***J. Geophys. Res. Space Phys.,*** *123* (5), 4215-4231, doi:10.1029/2017JA025033.

46. Li, W. Y., C. Wang, B. B. Tang, X. C. Guo, and **D. Lin** (2013), Global features of Kelvin-Helmholtz waves at the magnetopause for northward interplanetary magnetic field. ***J. Geophys. Res. Space Phys.,*** *118* (8), 5118-5126, doi:10.1002/jgra.50498.

Invited Presentations

1. **AGU Fall Meeting**, Characterizing auroral precipitation and ionospheric conductance with the Dragon King model in MAGE. *SM54A, Dec 2023, San Francisco, CA.*

2. **CEDAR Workshop Early Career Highlight Talk**, Exploring Stormtime Ionosphere-Thermosphere Dynamics With the Multiscale Atmosphere-Geospace Environment (MAGE) Model. *June 26, 2023, San Diego, CA.*

3. **NASA Magnetosphere Seminar**, Characterizing Auroral Precipitation and Ionospheric Conductance with the Multiscale Atmosphere-Geospace Environment (MAGE) Model. *Feb 13, 2023, Online.*

4. **University of California, Los Angeles Space Physics Seminar**, Characterizing Auroral Precipitation and Ionospheric Conductance with the Multiscale Atmosphere-Geospace Environment (MAGE) Model. *Jan 20, 2023, Los Angeles, CA.*

5. **University of Alaska, Fairbanks**, Subauroral polarization streams (SAPS): Intrinsic response of geospace during storm time. *Dec, 2022. Online.*

6. **University of Clemson Colloquium**, Diffuse electron precipitation in magnetosphere-ionosphere-thermosphere coupling. *Apr, 2021. Online*

7. **UNH Space Science Seminar**, Exploring the ionosphere/thermosphere dynamics during geospace storms with the Multiscale Atmosphere-Geospace Environment (MAGE) model. *Nov, 2020. Online.*

8. **NOAA SWPC Seminar**, Advances in Characterizing Magnetospheric Precipitation and its Effects in Geospace Modeling. *May, 2020. Online.*

White Papers and Reports

1. Ozturk, D., **D. Lin**, C. Gabrielse, and M. Chen et al. (2023a). The Significance of Magnetospheric Precipitation for the Coupling of Magnetosphere-Ionosphere-Thermosphere Systems: Sources and Properties. *Bulletin of the AAS, 55*(3), Heliophysics 2024 Decadal Whitepapers, doi: 10.3847/25c2cfeb.be32d93d.

2. Ozturk, D., **D. Lin**, C. Gabrielse, M. Chen, and M. Grandin et al. (2023b). The Significance of Magnetospheric Precipitation for the Coupling of Magnetosphere-Ionosphere-Thermosphere Systems: Effects on Ionospheric Conductance. *Bulletin of the AAS, 55*(3), Heliophysics 2024 Decadal Whitepapers, doi: 10.3847/25c2cfeb.b18cb918.

3. Wu, Q., W. Wang, **D. Lin**, J. Weiss, and Y. Zhang et al. (2023). Global Airglow Thermosphere Ionosphere Mission (GATI). *Bulletin of the AAS, 55*(3), Heliophysics 2024 Decadal Whitepapers, doi: 10.3847/25c2cfeb.2e8f7452.

4. Vines, S., B. J. Anderson, C. Waters, R. Allen, A. Maute, B. Kunduri, L. Paxton, R. Strangeway, **D. Lin**, and R. Robinson et al. (2023). Beyond AMPERE-NEXT: Envisioning the Next System of Global High-Latitude Electrodynamics. *Bulletin of the AAS, 55*(3), Heliophysics 2024 Decadal Whitepapers, doi: 10.3847/25c2cfeb.76348bf9.

5. Cao, X., X. Chu, H. Hsu, H. Cao, W. Sun, ... and **D. Lin** et al. (2023). Science Return of Probing Magnetospheric Systems of Ice Giants. *Bulletin of the AAS, 55*(3), Heliophysics 2024 Decadal Whitepapers, doi: 10.3847/25c2cfeb.c240b4b6.

6. **Lin, D.**, M. Cowee, D. Winske, and X. Fu, (2015), Heavy Ion Effects on Kelvin-Helmholtz Instability: Hybrid Study. *Los Alamos Space Weather Summer School R23esearch Reports.*