

Xinlin Li

Title: Professor

Citizenship: USA

Address: LASP and Department of Aerospace Engineering Sciences, University of Colorado, 3665 Discovery Drive, Boulder, CO 80303-7814; E-mail: Xinlin.Li@lasp.colorado.edu; Tel: 303-492-3514 (LASP) or 303-735-0523 (AERO)

Education:

1986—1992, Dartmouth College, New Hampshire, Ph.D. in Physics. Thesis topic: *Ring Current Oxygen Ion Interaction with Micropulsations*, (*Mary K. Hudson*)

1982—1985, Shanghai Institute of Optics and Fine Mechanics, Academia Sinica, M.S. in Physics. Thesis topic: *Interaction of Intense Laser Light with Plasmas*, (*Zhizhan Xu*)

1978—1982, University of Science and Technology of China, B.S. in Physics

Professional Societies:

American Geophysical Union

Asian and Oceanic Geophysical Society

European Geophysical Union

Employment:

2011—Present, Dept. of Aerospace Engineering Sciences and Laboratory for Atmospheric and Space Physics, University of Colorado Boulder, Professor.

2009—2011, Dept. of Aerospace Engineering Sciences and Laboratory for Atmospheric and Space Physics, University of Colorado Boulder, Associate Professor (with tenure).

2002—2009, Dept. of Aerospace Engineering Sciences and Laboratory for Atmospheric and Space Physics, University of Colorado Boulder, Associate Professor (without tenure).

2000—2002, Dept. of Aerospace Engineering Sciences and Laboratory for Atmospheric and Space Physics, University of Colorado Boulder, Associate Research Professor.

1995—2000, Laboratory for Atmospheric and Space Physics, University of Colorado Boulder, Research Associate.

1993—1995, Dartmouth College, Research Associate.

1992—1993, Dartmouth College, Postdoctoral Research Associate.

1989—1991, Dartmouth College, Research Assistant.

1987—Summer, Space Sciences Laboratory at UC Berkeley, visiting graduate student.

1986—1989, Dartmouth College, Teaching Assistant.

1985—1986, Shanghai University of Science and Technology, Lecturer.

1983—1985, Shanghai Institute of Optics and Fine Mechanics, Research Assistant.

Experiences and Responsibilities:

As a professor of aerospace engineering sciences, Professor Li supervises and supports a number

of graduate students as well as professional research associates and assistants. His principal research interests are studies of solar wind energy coupling into Earth's magnetosphere and of energetic particle dynamics in the magnetosphere. His early contribution to the successful simulation and explanation of the prompt formation of new radiation belts associated with a strong interplanetary shock on March 24, 1991 caused a major change in our understanding of particle transport in the radiation belt. Furthermore he and his collaborators made the first direct comparison of long-term and continuous measurements of energetic electrons in the solar wind and in the magnetosphere, concluding that the energetic electrons in the solar wind cannot directly supply the MeV electrons observed at geosynchronous orbit and that additional internal acceleration processes are required within the magnetosphere to produce the outer radiation belt. His current research includes analysis and interpretation of particle and field data from satellites and ground stations, energetic particle instrument development, modeling and simulation of energetic particle transport associated with magnetic storms and substorms, and prediction and real-time forecast of MeV electrons and the Dst, AL, AU, and AE indices. His teaching activities include aerospace environment, space dynamics, thermodynamics, and space-flight hardware design. He was awarded a CubeSat project from NSF and has been leading a group of graduate students as they design, build, calibrate, and test the CubeSat system, which was delivered on 1/9/2012, launched on 9/13/2012. The CubeSat operated for more than two years and returned high quality data. He was awarded another CubeSat project from NASA, CubeSat: Inner Radiation Belt Experiment (CIRBE), which was launched on 15 April 2023 and has been working nominally and re-entered on 4 October 2024.

He was awarded an instrument development project from NASA entitled: Medium Energy Electron Telescope (MEET), to measure electrons in the energy range of 30 - 800 keV with fine energy resolution. MEET passed vibration test and Thermal-Vacuum test.

He has been leading a small team to refurbish the flight-spares REPTile-2, renamed REPTile-3, to be integrated on Emirates Mission to Asteroid Belt (EMA), which is to be launched March of 2028.

Honor and Awards:

1. AGU Fellow (class of 2021).
2. NASA Group Achievement Award in recognition for exceptional dedication, skill, and perseverance in developing and delivering the Van Allen Probes for its long-awaited science mission on time and under budget, 2013.
3. NASA Group Achievement Award in recognition of outstanding contribution to the THEMIS mission, 2008.
4. Outstanding Young (45 yr or younger) Oversea Scientist Award from Chinese National Science Foundation (no more than one recipient in space physics was selected per year), 2007.

5. NASA/THEMIS Project Recognition acknowledging for outstanding contributions to the Science Support, Specially Instrument Definition and Mission Design to Address Radiation Belt Physics, 2006.
6. The European Space Agency Award in recognition of outstanding contribution made to Cluster's exploration of Geospace, 2006.
7. NASA Group Achievement Award on Polar/CEPPAD team, 1998.
8. NASA Group Achievement Award on Polar/CEPPAD team, 1995.
9. The Most Skillful Chairperson in 1994 workshop on: "Coupling of Micro- and Meso-scale Processes in Space Plasma Transport," October 16-19, 1994, Guntersville, Alabama.
10. National Citation of Merit from Academia Sinica for Research Project: "Interaction of Intense Laser Light with Plasmas," 1988.
11. Best Research Paper Award for young scientists from Shanghai Science and Technology Association for the work: "Effect of Small-Scale DC Magnetic Fields on Filamentation in Laser-Produced Plasmas," 1987.

Current Research Activities:

Dynamics of Earth's space environment, particularly in the magnetosphere; energy conversion from the solar wind into the magnetosphere, particle acceleration and transport, magnetic storms and substorms, and space weather effects. In particular:

- (1) the source, loss, energization, and transport of relativistic electrons in the magnetosphere, especially during major geomagnetic storms when the relativistic electrons have their largest variations, with the goal of understanding the fundamental physical mechanisms and making reliable prediction and forecast of the variations based on physical models.
- (2) energetic particle injection and magnetic and electric field configuration changes associated with geomagnetic storms and magnetospheric substorms.
- (3) spatial structure and temporal variation of electric and magnetic fields in the inner magnetosphere.
- (4) real time forecast of MeV electrons at geosynchronous orbit and the Dst, AU, AL, AE indices.
- (5) energetic particle instrument development and spacecraft design.

Spaceflight Programs Involved:

Principal Investigator (PI) on NASA/H-TIDES/H-FORT funded CubeSat: Inner Radiation Belt Experiment (CIRBE), \$4.92M, 08/13/2018-08/12/2025.

Co-Investigator on NASA/Miniature X-ray Solar Spectrometer (MinXSS) CubeSat Mission, a project heavily involved with students. MinXSS-1 was released from International Space Station in

May of 2016, operated for a year and returned high quality data before its re-entry in May of 2017. MinXSS-2 was launched in December 2018. PI: Tom Woods

PI on NSF funded CubeSat mission: Colorado Student Space Weather Experiment (CSSWE), a \$998,484 project heavily involved with students. The CubeSat system was delivered on 1/9/2011, launched on 13 September 2012, and the mission ended in October 2014.

Deputy-PI on NASA/Living With a Star (LWS)/Radiation Belt Storm Probe (RBSP)/Mission of Opportunity Radbelt Experiment (MORE), a \$1.5 Million project for the phase A study, 2007-2009. PI: Dan Baker.

Co-Investigator on NASA/LWS/RBSP/Energetic Particle, Composition, and Thermal Plasma (ECT) instrument suite, launched on 30 August 2012 and ended in December 2019. PI: Harlan Spence.

Co-Investigator on NASA/LWS/RBSP/Electric Field and Waves (EFW), launched on 30 August 2012 and ended in December 2019. PI: John Wygant.

Co-Investigator on NASA/THEMIS (Time History of Events and Macroscale Interactions During Substorms) mission. THEMIS, one of NASA/MIDEX missions, consisting of five space probes, was launched on 17 Feb. 2007 and in operation. PI: Vassilis Angelopoulos.

Co-Investigator of NASA/SAMPEX (Solar, Anomalous, and Magnetospheric Particle Explorer). NASA stopped the operation in June 2005 and gave it to the Dept. of Defense. Data were collected until its re-entry on 13 November 2012, and data analysis and archiving continue. PI: Glenn Mason.

Co-Investigator of NASA/IMEX (Inner Magnetosphere Explorer), a university explorer project, we completed the Phase A study, 1998-1999. PI: John Wygant.

Team member of NASA/POLAR/CEPPAD (Comprehensive Energetic Particle and Pitch Angle Distribution Experiment), operation ceased in April 2008 but data analysis and modeling work continues. PI at CU: Dan Baker.

Team member of NASA/CLUSTER/RAPID, in operation. PI at CU: Dan Baker.

Publications:

Peer-Refereed Journal Papers:

H-index: 70 (based on Google Scholar in January of 2025)

1. Jorge Romero-Minaya, Lauren W Blum, Jared Cantilina, Patricio Ramos, Hong Zhao, Skyler Krantz, Xinlin Li (2025), DART: A Dual Aperture Relativistic Electron Telescope for Small-sats, JGR, under review
2. Xinlin Li, Zheng Xiang, Yang Mei, Declan O'Brien et al (2025), A New Electron and Proton Radiation Belt Identified by CIRBE/REPTile-2 Measurements After the Magnetic Super Storm of May 10, 2024, JGR, accepted.
3. Yan, L., Liu, W., Zhang, D., Sarris, T. E., Li, X., & Tong, X. (2025). Statistical study of

- electric Pc5 pulsations in the inner magnetosphere observed by Cluster. *Geophysical Research Letters*, 52, e2024GL112358. <https://doi.org/10.1029/2024GL112358>
4. Xiao-Jia Zhang, Anton V. Artemyev, Xinlin Li et al.(2025), Relativistic and ultrarelativistic electron bursts in earth's magnetotail observed by lowaltitude satellites. *Geophysical Research Letters*, 52, e2024GL113280. <https://doi.org/10.1029/2024GL113280>
 5. Xiang Z (postdoc), Li X, Baker DN, Mei Y, O'Brien D, Hogan B, Zhao H, Brennan D, Ni B, Sarris T, et. al. "Earth-Based Transmitters Trigger Precipitation of Inner Radiation Belt Electrons: Unveiling Observations and Modeling Results." *AGU ADVANCES*. 5 (6) (December 2024): ARTN e2024AV001354.
 6. Zhang K, Artemyev AV, Li X, Zhang X-J, Angelopoulos V, Mei Y, Xiang Z, Grimmich N. "Nightside Electron Precipitation Patterns as Observed by ELFIN and CIRBE CubeSats." *JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS*. 129 (11) (November 2024): ARTN e2024JA033051.
 7. Mei, Y. (grad student), Li, X., OBrien, D., Xiang, Z., Zhao, H., Sarris, T., et al. (2025). Characteristics of zebra stripes of relativistic electrons unveiled by CIRBE/ REPTile2 measurements and test particle simulations. *Journal of Geophysical Research: Space Physics*, 130, e2024JA033187. <https://doi.org/10.1029/2024JA033187>
 8. da Silva DE, Elkington SR, Li X and Hudson MK (2024), Quantifying adiabatic motion in the outer radiation belt and ring current with invariant matching. *Front. Astron. Space Sci*. 11:1373019. doi: 10.3389/fspas.2024.1373019
 9. Zhang, D., Liu, W., Li, X., Sarris, T. E., Hao, Y., & Zhang, Z. (2024). Surfing acceleration of radiation belt relativistic electrons induced by the propagation of interplanetary shock. *Geophysical Research Letters*, 51, e2024GL109285. <https://doi.org/10.1029/2024GL109285>
 10. da Silva DE, Elkington SR, Li X, Hudson MK, Boyd AJ, Jaynes AN and Wiltberger M (2024), Radiation belt phase space density: calculation analysis and model dependence. *Front. Astron. Space Sci*. 11:1423545. doi: 10.3389/fspas.2024.1423545
 11. Hogan B, Li X, O'Brien D, Cantilina J, Edgar W, Boyajian S, Zhao H, Mei Y. "The Medium Energy Electron Telescope (MEET): Instrument Fabrication and Testing." *JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS*. 129 (10) (October 2024): ARTN e2024JA033019.
 12. Yang, X., Li, X., Dai, L., Wu, J., Kalegaev, V., Li, W., et al. (2024). A multi-satellite survey scheme for addressing open questions on the earths outer radiation belt dynamics. *Advances in Space Research*. <https://doi.org/10.1016/j.asr.2024.08.008>
 13. da Silva, D. E., Elkington, S. R., Li, X., Murphy, J., Hudson, M. K., Wiltberger, M. J., & Chan, A. A. (2024). Numerical calculations of adiabatic invariants from MHDdriven magnetic fields. *Journal of Geophysical Research: Space Physics*, 129, e2023JA032397. <https://doi.org/10.1029/2023JA032397>

14. Li X. "Unveiling Energetic Particle Dynamics in the Near-Earth Environment From CubeSat Missions." AGU ADVANCES. 5 (3) (June 2024): ARTN e2024AV001256.
15. Li X, Selesnick R, Mei Y, O'Brien D, Hogan B, Xiang Z, Khoo L, Zhao H, Schiller Q, Temerin M, et. al. "First Results From REPTile-2 Measurements Onboard CIRBE." GEOPHYSICAL RESEARCH LETTERS. 51 (3) (February 16, 2024): ARTN e2023GL107521.
16. J. Wu, L. Deng, J. Praks, ...X. Li,... et al., CORBES: Radiation belt survey with international small satellite constellation, Advances in Space Research, <https://doi.org/10.1016/j.asr.2024.04.051>
17. O'Brien (grad student), D., Li, X., Khoo, L., Selesnick, R. S., Hogan, B., Zhao, H., et al. (2024). Observations of relativistic electron enhancement and butterfly pitch angle distributions at low L (≤ 3). Geophysical Research Letters, 51, e2023GL106668. <https://doi.org/10.1029/2023GL106668>.
18. Tong X, Liu W, Zhang D, Sarris T, Li X, Zhang Z, Yan L. "Statistical Study on the Azimuthal Mode Number of Pc5 ULF Wave in the Inner Magnetosphere." JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS. 129 (2) (February 2024): ARTN e2023JA032306.
19. Sarris TE, Li X, Zhao H, Tu W, Papadakis K, Tourgaidis S, Liu W, Yan L, Rankin R, Xiang Z, et. al. "On the Contribution of Latitude-Dependent ULF Waves to the Radial Transport of Off-Equatorial Relativistic Electrons in the Radiation Belts." JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS. 129 (11) (November 2024): ARTN e2024JA032905.
20. Hogan, B. (grad student), Li, X., OBrien, D., Zhao, H., Khoo, L. Y., Mei, Y., et al. (2024). The Medium Energy Electron Telescope (MEET): Geant4based instrument design and analysis. Journal of Geophysical Research: Space Physics, 129, e2023JA032221. <https://doi.org/10.1029/2023JA032221>
21. Zhang D, Liu W, Zhang Z, Li X, Sarris TE, Goldstein J, Dmitry R. "Cavity Mode Wave Frequency Variation Associated With Inward Motion of the Magnetopause During Interplanetary Shock Compression." JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS. 128 (3) (March 01, 2023): ARTN e2023JA031299.
22. Hogan B (grad student), Li X, Xiang Z, Zhao H, Mei Y, O'Brien D, Baker DN, Kanekal S. "On the Dynamics of Ultrarelativistic Electrons (≥ 2 MeV) Near $L^*=3.5$ During 8 June 2015." JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS. 128 (11) (November 2023): ARTN e2023JA031911.
23. Krantz S, Zhao H, Blum L, Li X, Cantilina J. "Design and Instrument Characterization of the High-Energy Resolution Relativistic Electron Telescope (HERT) Using Geant4 Simulation." JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS. 128 (11) (November 2023): ARTN e2023JA031632.
24. Yan L, Liu W, Zhang D, Sarris TE, Li X, Tong X, Cao J. "Cluster Observation on the Latitudinal Distribution of Magnetic Pc5 Pulsations in the Inner Magnetosphere." JOUR-

- NAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS. 128 (10) (October 2023): ARTN e2023JA031789.
25. Zhao H, Califf ST, Goyal R, Li X, Gkioulidou M, Manweiler JW, Krantz S. "Statistical Analysis of the Differential Deep Penetration of Energetic Electrons and Protons into the Low L Region ($L < 4$).\" JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS. 128 (4) (April 01, 2023): ARTN e2022JA031125.
 26. Mei Y (grad student), Li X, Zhao H, Sarris T, Khoo L, Hogan B, O'Brien D, Califf S. "On the Energy-Dependent Deep ($L < 3.5$) Penetration of Radiation Belt Electrons.\" GEOPHYSICAL RESEARCH LETTERS. 50 (10) (May 28, 2023): ARTN e2022GL101921.
 27. Liu Y, Xiang Z, Ni B, Li X, Zhang K, Fu S, Gu X, Liu J, Cao X. "Quasi-Trapped Electron Fluxes Induced by NWC Transmitter and CRAND: Observations and Simulations.\" GEOPHYSICAL RESEARCH LETTERS. 49 (5) (March 16, 2022): ARTN e2021GL097443.
 28. Zhao H, Sarris TE, Li X, Huckabee IG, Baker DN, Jaynes AJ, Kanekal SG. "Statistics of Multi-MeV Electron Drift-Periodic Flux Oscillations Using Van Allen Probes Observations.\" GEOPHYSICAL RESEARCH LETTERS. 49 (7) (April 16, 2022): ARTN e2022GL097995.
 29. Khoo L-Y (grad student), Li X, Selesnick RS, Schiller Q, Zhang K, Zhao H, Hogan B, Cantilina JT, Sims A, Bauch E, et. al. "On the Challenges of Measuring Energetic Particles in the Inner Belt: A Geant4 Simulation of an Energetic Particle Detector Instrument, REPTile-2.\" JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS. 127 (4) (April 01, 2022): ARTN e2021JA030249.
 30. Spence HE, Caspi A, Bahcivan H, Nieves-Chinchilla J, Crowley G, Cutler J, Fish C, Jackson D, Jorgensen TM, Klumpar D, et. al. "Achievements and Lessons Learned From Successful Small Satellite Missions for Space Weather-Oriented Research.\" SPACE WEATHER-THE INTERNATIONAL JOURNAL OF RESEARCH AND APPLICATIONS. 20 (7) (July 01, 2022): ARTN e2021SW003031.
 31. Zhang D, Liu W, Du J, Yu Y, Li X, Sarris TE, Cao J. "Response of Electric Field in Terrestrial Magnetosphere to Interplanetary Shock.\" ASTROPHYSICAL JOURNAL. 938 (1) (October 01, 2022): ARTN 70.
 32. Sarris TE, Li X, Zhao H, Papadakis K, Liu W, Tu W, Angelopoulos V, Glassmeier K-H, Miyoshi Y, Matsuoka A, et. al. "Distribution of ULF Wave Power in Magnetic Latitude and Local Time Using THEMIS and Arase Measurements.\" JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS. 127 (10) (October 01, 2022): ARTN e2022JA030469.
 33. Breneman AW, Wygant JR, Tian S, Cattell CA, Thaller SA, Goetz K, Tyler E, Colpitts C, Dai L, Kersten K, et. al. "The Van Allen Probes Electric Field and Waves Instrument: Science Results, Measurements, and Access to Data.\" SPACE SCIENCE REVIEWS. 218 (8) (December 01, 2022): ARTN 69.

34. da Silva D, Gershman D, Barrie A, Elkington S, Li X, Kirk M, Giles B, Avanov L, Shuster J, Paterson B, et. al. "Three Solar Irradiance Proxies for Aperture Photoelectron Detections in Top-Hat ESAs Coated With Ebonol-C." JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS. 126 (12) (December 01, 2021): ARTN e2020JA028960.
35. Mei Y (grad student), Ge Y, Du A, Gu X, Summers D, Li X, Fu S, Xiang Z. "Energy-dependent Boundaries of Earth's Radiation Belt Electron Slot Region." ASTROPHYSICAL JOURNAL. 922 (2) (December 01, 2021): ARTN 246.
36. Chu X, Ma D, Bortnik J, Tobiska WK, Cruz A, Bouwer SD, Zhao H, Ma Q, Zhang K, Baker DN, et. al. "Relativistic Electron Model in the Outer Radiation Belt Using a Neural Network Approach." Space Weather. 19 (12) (December 2021). (Published online December 14, 2021)
37. Joseph J, Jaynes AN, Baker DN, Li X, Kanekal SG. "Van Allen Belt Punctures and Their Correlation With Solar Wind, Geomagnetic Activity, and ULF Waves." JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS. 126 (1) (January 01, 2021): ARTN e2020JA028679.
38. Hogan, Benjamin Hogan (grad student), Xinlin Li, Hong Zhao, LengYing Khoo, Allison Jaynes, Shrikanth Kanekal, Daniel Baker, J. Bernard Blake (2021) Multi-MeV electron dynamics near the inner edge of the outer radiation belt, GEOPHYSICAL RESEARCH LETTERS, 48 (23) (December 16, 2021): ARTN e2021GL095455.
39. Khoo, L.-Y. (grad student), X. Li, H. Zhao, S. A. Thaller, and B. Hogan (2021) Multi-Event Studies of Sudden Energetic Electron Enhancements in the Inner Magnetosphere and Its Association with Plasmapause Positions, Journal of Geophysical Research: Space Physics, 126 (11) (November 01, 2021): ARTN e2021JA029769.
40. Zhao, H., Sarris, T. E., Li, X., Weiner, M., Huckabee, I. G., Baker, D. N., et al. (2021). Van Allen Probes observations of multi-MeV electron drift-periodic flux oscillations in Earth's outer radiation belt during the March 2017 event. Journal of Geophysical Research: Space Physics, 126, e2021JA029284. <https://doi.org/10.1029/2021JA029284>
41. Baker, D. N., S. G. Kanekal, V. Hoxie, Xinlin Li et al. (2021) Relativistic Electron-Proton Telescope (REPT) Investigation: Design, Operational Properties, and Science Highlights, Space Science Reviews, 217:68, <https://doi.org/10.1007/s11214-021-00838-3>
42. Xiang, Z., Li, X., Kapali, S., Gannon, J., Ni, B., Zhao, H., et al. (2021). Modeling the dynamics of radiation belt electrons with source and loss driven by the solar wind. Journal of Geophysical Research: Space Physics, 126, e2020JA028988. <https://doi.org/10.1029/2020JA028988>
43. Sarris, T. E., Li, X., Zhao, H., Khoo, L. Y., Liu, W., & Temerin, M. A. (2021). On the association between electron flux oscillations and local phase space density gradients. Journal of Geophysical Research: Space Physics, 126, e2020JA028891. <https://doi.org/10.1029/2020JA028891>

44. Zhang K (grad student), Li X, Zhao H, Xiang Z, Khoo LY, Zhang W, Hogan B, Temerin MA. "Upper limit of electron fluxes observed in the radiation belts." *Journal of Geophysical Research: Space Physics* (December 15, 2020). (Published online December 15, 2020)
45. Zhang K (grad student), Li X, Xiang Z, Khoo LY, Zhao H, Looper MD, Temerin MA, Sauvaud J. "LongTerm Variations of QuasiTrapped and Trapped Electrons in the Inner Radiation Belt Observed by DEMETER and SAMPEX." *Journal of Geophysical Research: Space Physics*. 125 (9) (September 2020). (Published online September 23, 2020)
46. Zhang D, Liu W, Li X, Sarris TE, Wang Y, Xiao C, Zhang Z, Wygant JR. "Relation Between Shock-Related Impulse and Subsequent ULF Wave in the Earth's Magnetosphere." *GEO-PHYSICAL RESEARCH LETTERS*. 47 (23) (November 28, 2020): ARTN e2020GL090027.
47. Zhao H, Friedel RHW, Chen Y, Baker DN, Li X, Malaspina DM, Larsen BA, Skoug RM, Funsten HO, Reeves GD, et. al. "Equatorial pitch angle distributions of 1–50 keV electrons in Earth's inner magnetosphere: an empirical model based on the Van Allen Probes observations." *Journal of Geophysical Research: Space Physics* (December 15, 2020). (Published online December 15, 2020)
48. Sarris TE, Li X, Temerin M, Zhao H, Khoo LY, Turner DL, Liu W, Claudepierre SG. "Simulations of Electron Flux Oscillations as Observed by MagEIS in Response to Broadband ULF Waves." *JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS*. 125 (7) (July 01, 2020): ARTN e2020JA027798.
49. Li X, Xiang Z, Zhang K, Khoo L, Zhao H, Baker DN, Temerin MA. "New Insights From Long-Term Measurements of Inner Belt Protons (10s of MeV) by SAMPEX, POES, Van Allen Probes, and Simulation Results." *JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS*. 125 (8) (August 01, 2020): ARTN e2020JA028198.
50. Xiang Z (postdoc), Li X, Ni B, Temerin MA, Zhao H, Zhang K, Khoo LY. "Dynamics of Energetic Electrons in the Slot Region During Geomagnetically Quiet Times: Losses Due to WaveParticle Interactions Versus a Source From Cosmic Ray Albedo Neutron Decay (CRAND)." *Journal of Geophysical Research: Space Physics*. 125 (9) (September 2020). (Published online September 2020)
51. Zheng Xiang (postdoc), Xinlin Li, M. A. Temerin, Binbin Ni, Hong Zhao, Kun Zhang, and Leng Ying Khoo (2019), On Energetic Electron Dynamics during Geomagnetic Quiet Times in Earths Inner Radiation Belt due to Atmospheric Collisional Loss and Cosmic Ray Albedo Neutron Decay (CRAND) as a Source, *JGR*, 125 (2) (February 01, 2020): ARTN e2019JA027678.
52. Ripoll J, Claudepierre S, Ukhorskiy S, Colpitts C, Li X, Fennell J, Crabtree C. "Particle Dynamics in the Earth's Radiation Belts: Review of Current Research and Open Questions." *Journal of Geophysical Research: Space Physics* (December 26, 2019): 2019JA026735. (Published online December 26, 2019)

53. Zhao H, Baker DN, Li X, Malaspina DM, Jaynes AN, Kanekal SG. "On the Acceleration Mechanism of Ultrarelativistic Electrons in the Center of the Outer Radiation Belt: A Statistical Study." JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS (November 09, 2019).
54. Zeng G, Shen C, Rong ZJ, Li X, Chen T, Chen ZQ, Ma YH. "Monitoring the global evolution of the storm ring current and storm indices from confined ground geomagnetic observatories." JOURNAL OF ATMOSPHERIC AND SOLAR-TERRESTRIAL PHYSICS. 191 (September 15, 2019): ARTN 105049.
55. Baker D N, Hoxie V, Zhao H, Jaynes AN, Kanekal S, Li X, Elkington S. "Multiyear Measurements of Radiation Belt Electrons: Acceleration, Transport, and Loss." JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS. 124 (4) (April 01, 2019): 2588-2602.
56. Khoo L (grad student), Li X, Zhao H, Chu X, Xiang Z, Zhang K. "How Sudden, Intense Energetic Electron Enhancements Correlate With the Innermost Plasmapause Locations Under Various Solar Wind Drivers and Geomagnetic Conditions." Journal of Geophysical Research: Space Physics. 124 (11) (November 2019): 8992-9002. (Published online November 26, 2019)
57. Ni B, Huang H, Zhang W, Gu X, Zhao H, Li X, Baker D, Fu S, Xiang Z, Cao X. "Parametric Sensitivity of the Formation of Reversed Electron Energy Spectrum Caused by Plasmaspheric Hiss." GEOPHYSICAL RESEARCH LETTERS. 46 (8) (April 28, 2019): 4134-4143.
58. Zhao H, Ni B, Li X, Baker DN, Johnston WR, Zhang W, Xiang Z, Gu X, Jaynes AN, Kanekal SG, et. al. "Plasmaspheric hiss waves generate a reversed energy spectrum of radiation belt electrons." NATURE PHYSICS. 15 (4) (April 01, 2019): 367-372.
59. Zhao, H., D. N. Baker, X. Li, A. N. Jaynes, and S. G. Kanekal (2019), The effects of geomagnetic storms and solar wind conditions on the ultrarelativistic electron flux enhancements, JGR, 124 (3) (March 01, 2019): 1948-1965.
60. Zheng Xiang (postdoc), Xinlin Li, R. Selesnick, M. A. Temerin, Binbin Ni, Hong Zhao, Kun Zhang, and Leng Ying Khoo (2019), Modeling the quasi-trapped electron fluxes from Cosmic Ray Albedo Neutron Decay (CRAND), GRL, 46 (4) (February 28, 2019): 1919-1928.
61. Hong Zhao, Binbin Ni, Xinlin Li, Daniel Baker, William Johnston, Wenxun Zhang, Zheng Xiang, Xudong Gu, Allison Jaynes, Shri Kanekal, J. B. Blake, Seth Claudepierre, Michael Temerin, Herbert Funsten, Geoffrey Reeves, and Alexander Boyd (2019) Plasmaspheric hiss waves generate a reversed energy spectrum of radiation belt electrons, *Nature-Physics*, <https://doi.org/10.1038/s41567-018-0391-6>.
62. K. Zhang (grad student), X. Li, H. Zhao, Q. Schiller, L. Y. Khoo, Z. Xiang, R. Selesnick, M. A. Temerin, and J. A. Sauvaud (2019), Cosmic Ray Albedo Neutron Decay (CRAND) as a source of inner belt electrons: Energy spectrum study, Geophysical Research Letter, 26 December 2018, <https://doi.org/10.1029/2018GL080887>

63. Khoo, L. Y. (grad student), Li, X., Zhao, H., Sarris, T. E., Xiang, Z., Zhang, K., et al. (2018). On the initial enhancement of energetic electrons and the innermost plasmopause locations: Coronal mass ejection-driven storm periods. *Journal of Geophysical Research: Space Physics*, 123. <https://doi.org/10.1029/2018JA026074>
64. Zhao H, Baker DN, Li X, Jaynes AN, Kanekal SG. "The Acceleration of Ultrarelativistic Electrons During a Small to Moderate Storm of 21 April 2017." *GEOPHYSICAL RESEARCH LETTERS*. 45 (12) (June 28, 2018): 5818-5825.
65. Zhang D, Liu W, Li X, Sarris T, Xiao C, Wygant JR. "Observations of Impulsive Electric Fields Induced by Interplanetary Shock." *GEOPHYSICAL RESEARCH LETTERS*. 45 (15) (August 16, 2018): 7287-7296.
66. Jaynes AN, Ali AF, Elkington SR, Malaspina DM, Baker DN, Li X, Kanekal SG, Henderson MG, Kletzing CA, Wygant JR. "Fast Diffusion of Ultrarelativistic Electrons in the Outer Radiation Belt: 17 March 2015 Storm Event." *GEOPHYSICAL RESEARCH LETTERS*. 45 (20) (October 28, 2018): 10874-10882.
67. Zhao H, Friedel RHW, Chen Y, Reeves GD, Baker DN, Li X, Jaynes AN, Kanekal SG, Claude-pierre SG, Fennell JF, et. al. "An Empirical Model of Radiation Belt Electron Pitch Angle Distributions Based On Van Allen Probes Measurements." *JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS*. 123 (5) (May 01, 2018): 3493-3511.
68. Mason, James, et al. (2017), MinXSS-1 CubeSat On-Orbit Pointing and Power Performance: The First Flight of the Blue Canyon Technologies XACT 3-axis Attitude Determination and Control System, *Journal of Small Satellites*, arXiv:1706.06967 [astro-ph.IM].
69. Li, Xinlin, Richard Selesnick, Quintin Schiller, Kun Zhang, Hong Zhao, Daniel Baker, and Michael Temerin (2017), Measurement of electrons from albedo neutron decay and neutron density in near-Earth space, *Nature* 552, 382-385, doi:10.1038/nature24642.
70. Califf, S., X. Li, H. Zhao, A. Kellerman, T. E. Sarris, A. Jaynes, and D. M. Malaspina (2017), The role of the convection electric field in filling the slot region between the inner and outer radiation belts, *J. Geophys. Res. Space Physics*, 122, doi:10.1002/2016JA023657.
71. Xiang, Z., Tu, W., Li, X., Ni, B., Morley, S. K., & Baker, D. N. (2017). Understanding the mechanisms of radiation belt dropouts observed by Van Allen Probes. *Journal of Geophysical Research: Space Physics*, 122. <https://doi.org/10.1002/2017JA024487>.
72. Zhao, H., Baker, D. N., Califf, S., Li, X., Jaynes, A. N., Leonard, T., Spence, H. E. (2017). Van Allen probes measurements of energetic particle deep penetration into the low L region ($L < 4$) during the storm on 8 April 2016. *Journal of Geophysical Research: Space Physics*, 122. <https://doi.org/10.1002/2017JA024558>.
73. Zhao, H., D. N. Baker, A. N. Jaynes, X. Li, S. R. Elkington, S. G. Kanekal, H. E. Spence, A. J. Boyd, C.-L. Huang, and C. Forsyth (2017), On the relation between radiation belt

- electrons and solar wind parameters/geomagnetic indices: Dependence on the first adiabatic invariant and L^* , *J. Geophys. Res. Space Physics*, 122, doi:10.1002/2016JA023658.
74. Li, L. Y., J. Yu, J. B. Cao, J. Y. Yang, X. Li, D. N. Baker, G. D. Reeves, and H. Spence (2017), Roles of whistler mode waves and magnetosonic waves in changing the outer radiation belt and the slot region, *J. Geophys. Res. Space Physics*, 122, 54315448, doi:10.1002/2016JA023634.
 75. Selesnick, R. S., Baker, D. N., Kanekal, S. G., Hoxie, V. C., & Li, X. (2018). Modeling the proton radiation belt with Van Allen Probes Relativistic Electron-Proton Telescope data. *Journal of Geophysical Research: Space Physics*, 123. <https://doi.org/10.1002/2017JA024661>
 76. Schiller, Q., W. Tu, A. F. Ali, X. Li, H. C. Godinez, D. L. Turner, S. K. Morley, and M. G. Henderson (2017), Simultaneous event-specific estimates of transport, loss, and source rates for relativistic outer radiation belt electrons, *J. Geophys. Res. Space Physics*, 122, doi:10.1002/2016JA023093.
 77. Sarris, T. E., X. Li, M. Temerin, H. Zhao, S. Califf, W. Liu, and R. Ergun (2017), On the relationship between electron flux oscillations and ULF wave-driven radial transport, *J. Geophys. Res. Space Physics*, 122, doi:10.1002/2016JA023741.
 78. Li, X., D. N. Baker, H. Zhao, K. Zhang, A. N. Jaynes, Q. Schiller, S. G. Kanekal, J. B. Blake, and M. Temerin (2017), Radiation belt electron dynamics at low L (<4): Van Allen Probes era versus previous two solar cycles, *J. Geophys. Res. Space Physics*, 122, doi:10.1002/2017JA023924.
 79. Zhang, K. (grad student), X. Li, Q. Schiller, D. Gerhardt, H. Zhao, and R. Millan (2017), Detailed characteristics of radiation belt electrons revealed by CSSWE/REPTile measurements: Geomagnetic activity response and precipitation observation, *J. Geophys. Res. Space Physics*, 122, doi:10.1002/2017JA024309.
 80. Sarris, E. T., and Xinlin Li (2017) Geomagnetic activity and local time dependence of the distribution of ultra low-frequency wave power in azimuthal wavenumbers, *m. Ann. Geophys.*, 35, 629638, 2017 www.ann-geophys.net/35/629/2017/doi:10.5194/angeo-35-629-2017
 81. Zhao H (grad student), Li X, Baker DN, Claudepierre SG, Fennell JF, Blake JB, Larsen BA, Skoug RM, Funsten HO, Friedel RHW. "Ring current electron dynamics during geomagnetic storms based on the Van Allen Probes measurements." *JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS*. 121 (4) (April 01, 2016): 3333-3346.
 82. Sarris TE, Li X. "Calculating ultra-low-frequency wave power of the compressional magnetic field vs. L and time: multi-spacecraft analysis using the Van Allen probes, THEMIS and GOES." *ANNALES GEOPHYSICAE*. 34 (6) (January 01, 2016): 565-571.
 83. Yang YY, Shen C, Dunlop M, Rong ZJ, Li X, Angelopoulos V, Chen ZQ, Yan GQ, Ji Y. "Storm time current distribution in the inner equatorial magnetosphere: THEMIS observations." *JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS*. 121 (6) (June 01, 2016): 5250-5259.

84. Baker DN, Jaynes AN, Kanekal SG, Foster JC, Erickson PJ, Fennell JF, Blake JB, Zhao H, Li X, Elkington SR. "Highly relativistic radiation belt electron acceleration, transport, and loss: Large solar storm events of March and June 2015." JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS. 121 (7) (July 01, 2016): 6647-6660.
85. Califf S (grad student), Li X, Wolf RA, Zhao H, Jaynes AN, Wilder FD, Malaspina DM, Redmon R. "Large-amplitude electric fields in the inner magnetosphere: Van Allen Probes observations of subauroral polarization streams." JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS. 121 (6) (June 01, 2016): 5294-5306.
86. Kanekal SG, Baker DN, Fennell JF, Jones A, Schiller Q, Richardson IG, Li X, Turner DL, Califf S, Claudepierre SG. "Prompt acceleration of magnetospheric electrons to ultrarelativistic energies by the 17 March 2015 interplanetary shock." JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS. 121 (8) (August 01, 2016): 7622-7635.
87. Xiang Z, Ni B, Zhou C, Zou Z, Gu X, Zhao Z, Zhang X, Zhang X, Zhang S, Li X. "Multi-satellite simultaneous observations of magnetopause and atmospheric losses of radiation belt electrons during an intense solar wind dynamic pressure pulse." Annales Geophysicae. 34 (5) (2016): 493-509.
88. Li L. Y., Yu J, Cao JB, Wang ZQ, Yu YQ, Reeves GD, Li X. "Effects of ULF waves on local and global energetic particles: Particle energy and species dependences." Journal of Geophysical Research: Space Physics (2016).
89. Ni B, Zou Z, Li X, Bortnik J, Xie L, Gu X. "Occurrence characteristics of outer zone relativistic electron butterfly distribution: A survey of Van Allen Probes REPT measurements." Geophysical Research Letters. 43 (11) (June 16, 2016): 5644-5652.
90. Foster JC, Erickson PJ, Baker DN, Jaynes AN, Mishin EV, Fennell JF, Li X, Henderson MG, Kanekal SG. "Observations of the impenetrable barrier, the plasmapause, and the VLF bubble during the 17 March 2015 storm." JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS. 121 (6) (June 01, 2016): 5537-5548.
91. Schiller Q, Kanekal SG, Jian LK, Li X, Jones A, Baker DN, Jaynes A, Spence HE. "Prompt injections of highly relativistic electrons induced by interplanetary shocks: A statistical study of Van Allen Probes observations." Geophysical Research Letters (2016).
92. Selesnick RS, Baker DN, Jaynes AN, Li X, Kanekal SG, Hudson MK, Kress BT (2016), Inward diffusion and loss of radiation belt protons, JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS. 121 (3) (March 01, 2016): 1969-1978.
93. Liu, Wenlong, Weichao Tu, Xinlin Li, Theodore Sarris, Yuri Khotyaintsev, Huishan Fu, Hui Zhang, Quanqi Shi (2016), On the calculation of electric diffusion coefficient of radiation belt electrons with in situ electric field measurements by THEMIS, *Geophysical Research Letter*, 43 (3) (February 16, 2016): 1023-1030.

94. Mason, James P., T. N. Woods, A. Caspi, P. C. Chamberlin, C. Moore, A. Jones, R. Kohnert, X. Li, S. Palo, S. C. Solomon (2016), Miniature X-Ray Solar Spectrometer (MinXSS) A Science-Oriented, University 3U CubeSat, *Journal of Spacecraft and Rockets*, 53 (2) (March 01, 2016): 328-339.
95. Liu, Xiu, W. Liu, J. B. Cao, H. S. Fu, J. Yu, X. Li (2016), Dynamic plasmapause model based on THEMIS measurements, *J. Geophys. Res. Space Physics*, 10,54310,556, doi:10.1002/2015JA021801.
96. Kanekal, S. G., ..., X. Li ..., et al. (2015), Relativistic electron response to the combined magnetospheric impact of a coronal mass ejection overlapping with a high-speed stream: Van Allen Probes observations, *J. Geophys. Res. Space Physics*, 120, 76297641, doi:10.1002/2015JA021395
97. Ni, Binbin, ... X. Li (2015) Variability of the pitch angle distribution of radiation belt ultrarelativistic electrons during and following intense geomagnetic storms: Van Allen Probes observations, *J. Geophys. Res. Space Physics*, 120, 4863-4876, DOI: 10.1002/2015JA021065 Published: JUN 2015.
98. Zhao, H. (grad student), X. Li, et al. (2015), The evolution of ring current ion energy density and energy content during geomagnetic storms based on Van Allen Probes measurements, *J. Geophys. Res. Space Physics*, 120, 74937511, doi:10.1002/2015JA021533.
99. Dai, L., ..., X. Li, ... et al. (2015), Near-Earth injection of MeV electrons associated with intense dipolarization electric fields: Van Allen Probes observations, *Geophys. Res. Lett.*, 42, doi:10.1002/2015GL064955.
100. Jaynes, A. N., ..., X. Li, ... et al. (2015), Source and seed populations for relativistic electrons: Their roles in radiation belt changes, *J. Geophys. Res. Space Physics*, 120, doi:10.1002/2015JA021234.
101. Temerin, M., and X. Li (2015), The Dst index underestimates the solar cycle variation of geomagnetic activity, *J. Geophys. Res. Space Physics*, 120, doi:10.1002/2015JA021467.
102. Blum LW, Halford A, Millan R, Bonnell JW, Goldstein J, Usanova M, Engebretson M, Ohnsted M, Reeves G, Singer H, Clilverd M., and X. Li (2015), Observations of coincident EMIC wave activity and duskside energetic electron precipitation on 18-19 January 2013. *GEOPHYSICAL RESEARCH LETTERS* 42(14):5727-5735 28 Jul 2015
103. Li, X., R. S. Selesnick, D. N. Baker, A. N. Jaynes, S. G. Kanekal, Q. Schiller, L. Blum, J. Fennell, and J. B. Blake (2015), Upper limit on the inner radiation belt MeV electron intensity, *J. of Geophysical Res.*, 120(2):1215-1228 1 Feb 2015.
104. Lauren Blum (grad student), Xinlin Li, and Mick Denton, Rapid MeV electron precipitation as observed by SAMPEX/HILT during high speed stream driven storms, *J. of Geophysical Res.*, 120, doi:10.1002/2014JA020633.

105. Shen C., G. Zeng, X. Li, and Z. J. Rong, Evolution of the Storm Magnetic Field Disturbance around Earth's Surface and the Associated Ring Current as Deduced from Multiple Ground Observatories, *J. Geophys. Res.*, 120(1):564-580 1 Jan 2015.
106. Shen C., Y. Y. Yang, Z. J. Rong, X. Li, M. Dunlop, C. M. Carr, Z. X. Liu, D. N. Baker, Z. Q. Chen, Y. Ji, G. Zeng (2014), Direct calculation of the Ring Current distribution and magnetic structure seen by Cluster during Geomagnetic Storms, *J. Geophys. Res.*, 119, doi:10.1002/2013JA019460.
107. Yang, Y. Y., C. Shen, Y. C. Zhang, Z. J. Rong, X. Li, M. Dunlop, Y. H. Ma, Z. X. Liu, C. M. Carr, and H. Rme (2014), The force-free configuration of flux ropes in geomagnetotail: Cluster observations, *J. Geophys. Res. Space Physics*, 119, 63276341, doi:10.1002/2013JA019642.
108. Jaynes, A. N. (postdoc), X. Li, et al. (2014), Evolution of relativistic outer belt electrons during an extended quiescent period, *J. Geophys. Res. Space Physics*, 119, doi:10.1002/2014JA020125.
109. Selesnick, R. S., D. N. Baker, A. N. Jaynes, X. Li, S. G. Kanekal, M. K. Hudson, and B. T. Kress (2014), Observations of the inner radiation belt: CRAND and trapped solar protons, *J. Geophys. Res. Space Physics*, 119, 65416552, doi:10.1002/2014JA020188.
110. Califf, S. (grad student), X. Li., et al. (2014), THEMIS measurements of quasi-static electric fields in the inner magnetosphere, *J. Geophys. Res. Space Physics*, 119, doi:10.1002/2014JA020360.
111. H. Zhao (grad student), X. Li, J. B. Blake, J. F. Fennell, S. G. Claudepierre, D. N. Baker, A. N. Jaynes, and D. M. Malaspina (2014), Characteristics of pitch angle distributions of hundreds of keV electrons in the slot region and inner radiation belt, *J. Geophys. Res. Space Physics*, 119, doi:10.1002/2014JA020386.
112. H. Zhao (grad student), X. Li et al. (2014), Peculiar pitch angle distribution of relativistic electrons in the inner radiation belt and slot region, *Geophys. Res. Lett.*, 41, 22502257, doi:10.1002/2014GL059725.
113. Baker, D. N., A. N. Jaynes, V. C. Hoxie, R. M. Thorne, J. C. Foster, X. Li et al. (2014), An impenetrable barrier to ultrarelativistic electrons in the Van Allen radiation belts, *Nature*, doi:10.1038/nature13956.
114. Baker, D. N., A. N. Jaynes, X. Li et al. (2014), Gradual Diffusion and Punctuated Phase Space Density Enhancements of Highly Relativistic Electrons: Van Allen Probes Observations, *Geophys. Res. Lett.*, 41, 13511358, doi:10.1002/2013GL058942.
115. Schiller, Q. (grad student), Xinlin Li, Lauren Blum, Weichao Tu, Drew L. Turner, J. B. Blake (2014), A non-storm time enhancement of relativistic electrons in the outer radiation belt, *Geophys. Res. Lett.*, 41, 16, doi:10.1002/2013GL058485.
116. Schiller, Q. (grad student), D. Gerhardt, L. Blum, X. Li, and S. Palo (2014), Design and Scientific Return of a Miniaturized Particle Telescope Onboard the Colorado Student

- Space Weather Experiment (CSSWE) CubeSat, 35th IEEE Aerospace Conference, 8.1102, doi:10.1109/AERO.2014.6836372.
117. Gerhardt D Scott E. Palo, Quintin Schiller, Lauren Blum, Xinlin Li, and Rick Kohnert (2014), The Colorado Student Space Weather Experiment (CSSWE) On-Orbit Performance, *J. of Small Satellites*, Vol. 03, No. 01 (Jul 2014) pp. 265-281.
 118. Baker, D. N., V. C. Hoxie, A. Jaynes, A. Kale, S. G. Kanekal, X. Li, G. D. Reeves and H. E. Spence (2013), James Van Allen and His Namesake NASA Mission, *Eos Trans. AGU*, 94(49), 469.
 119. Blum, L. W. (grad student), Q. Schiller, X. Li, R. Millan, A. Halford, and L. Woodger (2013), New conjunctive CubeSat and balloon measurements to quantify rapid energetic electron precipitation, *Geophys. Res. Lett.*, 40, 58335837, doi:10.1002/2013GL058546.
 120. Luo, B. (postdoc), X. Li, M. Temerin, and S. Liu (2013), Prediction of the AU, AL, and AE indices using solar wind parameters, *J. Geophys. Res. Space Physics*, 118, doi:10.1002/2013JA019188.
 121. D. N. Baker, V. C. Hoxie, A. Jaynes, A. Kale, S. G. Kanekal, X. Li, G. D. Reeves, and H. E. Spence (2013), James Van Allen and His Namesake NASA Mission, *AGU/EOS*, Vol. 94, No. 49, page 469-470, 3 December 2013.
 122. Ngwira, C. M., A. Pulkkinen, M. Leila Mays, M. M. Kuznetsova, A. B. Galvin, K. Simunac, D. N. Baker, X. Li, Y. Zheng, and A. Gloer (2013), Simulation of the 23 July 2012 extreme space weather event: What if this extremely rare CME was Earth directed?, *SpaceWeather*, 11, 671679, doi:10.1002/2013SW000990.
 123. D. N. Baker, X. Li et al. (2013), A major solar eruptive event in July 2012: Defining extreme space weather scenarios, *Space Weather*, 11, DOI:10.1002/swe.20097.
 124. Sarris, T. E., X. Li, W. Liu, E. Argyriadis, A. Boudouridis, and R. Ergun (2013), Mode number calculations of ULF field-line resonances using ground magnetometers and THEMIS measurements, *J. Geophys. Res. Space Physics*, 118, doi:10.1002/2012JA018307.
 125. Li, X., et al. (2013), First results from CSSWE CubeSat: Characteristics of relativistic electrons in the near-Earth environment during the October 2012 magnetic storms, *J. Geophys. Res. Space Physics*, 118, doi:10.1002/2013JA019342.
 126. Liu, W., J. B. Cao, X. Li, T. E. Sarris, Q.-G. Zong, M. Hartinger, K. Takahashi, H. Zhang, Q. Q. Shi, and V. Angelopoulos (2013), Poloidal ULF wave observed in the plasmasphere boundary layer, *J. Geophys. Res. Space Physics*, 118, 42984307, doi:10.1002/jgra.50427.
 127. Li, X., S. Palo, R. Kohnert, L. Blum, D. Gerhardt, Q. Schiller, and S. Califf (2013), Small Mission Accomplished by Students - Big Impact on Space Weather Research, *Space Weather*, 11, doi:10.1002/swe.20025

128. Baker, D. N., X. Li, ... (2013), A Long-lived Relativistic Electron Storage Ring Embedded in Earths Outer Van Allen Belt, *Science* 340(6129), 186190, doi:10.1126/science.339.6123.1019-b.
129. H. Zhao (grad student) and X. Li (2013a), Modeling energetic electron penetration into the slot region and inner radiation belt, *J. Geophys. Res.*, 118, 6936-6945, doi:10.1002/2013JA019240.
130. H. Zhao (grad student) and X. Li (2013b), Inward shift of outer radiation belt electrons as a function of Dst index and the influence of the solar wind on electron injections into the slot region, *J. Geophys. Res.*, 118, doi:10.1029/2012JA018179.
131. Wygant, J. R., ... X. Li,...(2013) The Electric Field and Waves (EFW) Instruments on the Radiation Belt Storm Probes Mission, *Space Sci. Rev.*, DOI: 10.1007/s11214-013-0013-7.
132. Spence, H., ... X. Li, ... (2013) Science Goals and Overview of the Radiation Belt Storm Probes (RBSP) Energetic Particle, Composition, and Thermal Plasma (ECT) Suite on NASAs Van Allen Probes Mission, *Space Sci. Rev.*, DOI: 10.1007/s11214-013-0007-5.
133. D. N. Baker, ... X. Li, ... (2013), The Relativistic Electron-Proton Telescope (REPT) Instrument on Board the Radiation Belt Storm Probes (RBSP) Spacecraft: Characterization of Earths Radiation Belt High-Energy Particle Populations, *Space Sci. Rev.*, doi:10.1007/s11214-012-9950-9.
134. Ngwira, C. M., A. Pulkkinen, M. Leila Mays, M. M. Kuznetsova, A. B. Galvin, K. Simunac, D. N. Baker, X. Li, Y. Zheng, and A. Gloer (2013), Simulation of the 23 July 2012 extreme space weather event: What if this extremely rare CME was Earth directed?, *Space Weather*, 11, 671679, doi:10.1002/2013SW000990.
135. Tu, W.(grad student and postdoc), S. R. Elkington, X. Li, W. Liu, and J. Bonnell (2012), Quantifying radial diffusion coefficients of radiation belt electrons based on global MHD simulation and spacecraft measurements, *J. Geophys. Res.*, A10210, doi:10.1029/2012JA017901.
136. Shen, C., Z. J. Rong, M. W. Dunlop, Y. H. Ma, X. Li, G. Zeng, G. Q. Yan, W. X. Wan, Z. X. Liu, C. M. Carr, and H. Rme (2012), Spatial gradients from irregular, multiple-point spacecraft configurations, *J. Geophys. Res.*, 117, A11207, doi:10.1029/2012JA018075.
137. L. W. Blum (grad student), E. A. MacDonald, L. B. N. Clausen, X. Li (2012), A comparison of magnetic field measurements and a plasma-based proxy to infer EMIC wave distributions at geosynchronous orbit, *J. Geophys. Res.*, 117, A5, doi:10.1029/2011JA017474, 2012.
138. Bingxian Luo (grad student), Xinlin Li, Weichao Tu, Jiancun Gong, Siqing Liu (2012), Comparison of energetic electron flux and phase space density in the magnetosheath and in the magnetosphere, *J. Geophys. Res.*, 117, A5, doi:10.1029/2012JA017520.
139. Schiller, Q. (grad student), X. Li, J. Koller, H. Godinez, and D. L. Turner (2012), A parametric study of the source rate for outer radiation belt electrons using a Kalman filter, *J. Geophys. Res.*, 117, A09211, doi:10.1029/2012JA017779.

140. Z. J. Rong, W. X. Wan, C. Shen, X. Li, M. W. Dunlop, and H. Rme (2012), Profile of strong magnetic field B_y component in magnetotail current sheets, *J. Geophys. Res.*, 117, A6, doi:10.1029/2011JA017402.
141. Ma, Y., C. Shen, V. Angelopoulos, A. T. Y. Lui, X. Li, H. U. Frey, M. Dunlop, H. U. Auster, J. P. McFadden, and D. Larson (2012), Tailward leap of multiple expansions of the plasma sheet during a moderately intense substorm: THEMIS observations, *J. Geophys. Res.*, 117, A07219, doi:10.1029/2012JA017768.
142. Li, X., M. Temerin, D. N. Baker, and G. D. Reeves (2011), Behavior of MeV electrons at geosynchronous orbit during last two solar cycles, *J. Geophys. Res.*, 116, A11207, doi:10.1029/2011JA016934.
143. Tu, Weichao (grad student), and X. Li (2011), Adiabatic effects on radiation belt electrons at low altitude, *J. Geophys. Res.*, 116, A09201, doi:10.1029/2011JA016468.
144. Luo, B. X. (grad student), W. C. Tu (grad student), X. Li, J. C. Gong, S. Q. Liu, E. Burin des Roziers, and D. N. Baker (2011), On energetic electrons (>38 keV) in the central plasma sheet: Data analysis and modeling, *J. Geophys. Res.*, 116, A09220, doi:10.1029/2011JA016562.
145. W. Liu, T. E. Sarris, X. Li, Q.G. Zong, R. Ergun, V. Angelopoulos, and K. H. Glassmeier (2011), Spatial structure and temporal evolution of a dayside poloidal ULF wave event, *Geophys. Res. Lett.*, 38, L19104, doi:10.1029/2011GL049476.
146. Turner, D. L. (grad student), X. Li, E. Burin des Roziers, and S. Monk (2011), An improved forecast system for relativistic electrons at geosynchronous orbit, *Space Weather*, 9, S06003, doi:10.1029/2010SW000647.
147. Rong, Z. J., C. Shen W. X. Wan, X. Li, M. W. Dunlop, A. A. Petrukovich, L.-N. Hau, E. Lucek, H. Reme (2011), Statistical survey on the magnetic structure in magnetotail current sheets, *J. Geophys. Res.*, 116, A09218, doi:10.1029/2011JA016489.
148. Palo, S. E., X. Li, D. Turner, D. Gerhardt, V. Hoxie, R. Kohnert, and S. Batiste (2011), The Colorado Student Space Weather Experiment : A CubeSat for Space Physics, *Adv. Space Res.*, under review.
149. Turner, D. (grad student), S. Eriksson, W. Tu, W. Liu, T. D. Phan, X. Li, W.-L. Teh, V. Angelopoulos, J. P. McFadden, and K. -H. Glassmeier (2011), Multi-spacecraft observations of a foreshock-induced magnetopause disturbance exhibiting distinct plasma flows and an intense density compression, *J. Geophys. Res.*, 116, A04230, doi:10.1029/2010JA015668.
150. Li, X., S. Palo, and R. Kohnert (2011), Small Mission for Space Weather Research, *Space Weather*, 9, S04006, doi:10.1029/2011SW000668.
151. Yang, B., Q.-G. Zong, S. Y. Fu, X. Li, A. Korth, H. Reme (2011), The role of ULF waves interacting with oxygen ions at the outer ring current during storm times, *J. Geophys. Res.*, 116, A01203, doi:10.1029/2010JA015683.

152. Turner, D. L. (grad student) and X. Li (2011), Using spacecraft measurements ahead of Earth in the Parker spiral to improve terrestrial space weather forecasts, *Space Weather*, *9*, S01002, doi:10.1029/2010SW000627.
153. Yang, B., Q.-G. Zong, S. Y. Fu, K. Takahashi, X. Li, Y. F. Wang, Z. Y. Pu, H. S. Fu, H. Reme, C. Yue, H. Zheng, C. Sheng (2010), Pitch angle evolutions of oxygen ions driven by ULF standing waves excited during geomagnetic storms, *J. Geophys. Res.*, *116*, A03207, doi:10.1029/2010JA016047.
154. Liu, W. (postdoc), T. E. Sarris, X. Li, R. Ergun, V. Angelopoulos, J. Bonnell, K. H. Glassmeier (2010), Solar wind influence on Pc4 and Pc5 ULF wave activity in the inner magnetosphere, *J. Geophys. Res.*, *115*, A12201, doi:10.1029/2010JA015299.
155. He, Z. H., Z. X. Liu, T. Chen, C. Shen, X. Li, C. Carr, and H. Rme (2010), The large-scale magnetospheric electric field observed by Double Star TC-1, *ANNALES GEOPHYSICAE*, *28* (9): 1625-1631.
156. Sarris, T. E., W. Liu, X. Li, K. Kabin, E. Talaat, V. Angelopoulos, J. Bonnell, K.-H. Glassmeier (2010), THEMIS observations of the Spatial Extent and Excitation of Field Line Resonances, *Geophys. Res. Lett.*, *37*, L15104, doi:10.1029/2010GL044125.
157. Tu, Weichao (grad student), Richard Selesnick, Xinlin Li, and Mark Looper (2010), Quantification of the Precipitation Loss of Radiation Belt Electrons Observed by SAMPEX, *J. Geophys. Res.*, *115*, A07210, doi:10.1029/2009JA014949.
158. Turner, Drew (grad student), Xinlin Li, Geoff D. Reeves, and Howard J. Singer (2010), On phase space density radial gradients of Earth's outer belt electrons prior to sudden solar wind pressure enhancements: Results from distinctive events and a superposed epoch analysis, *J. Geophys. Res.*, *115*, A1, doi:10.1029/2009JA014423.
159. Burin des Roziers, E. (grad student), X. Li, D. N. Baker, T. A. Fritz, R. L. McPherron, and I. Dandouras (2009), Cluster observations of energetic electron flux variations within the plasma sheet, *J. Geophys. Res.*, *114*, A11208, doi:10.1029/2009JA014239.
160. Liu, W. (postdoc), T. E. Sarris, X. Li, S. R. Elkington, R. Ergun, V. Angelopoulos, J. Bonnell, K. H. Glassmeier (2009), Electric and magnetic field observations of Pc4 and Pc5 pulsations in the inner magnetosphere: a statistical study, *J. Geophys. Res.*, *114*, A12, doi:10.1029/2009JA014243.
161. Li, L. Y., J. B. Cao, G. C. Zhou, and X. L. Li (2009), Statistical roles of storms and substorms in changing the entire outer zone relativistic electron population, *J. Geophys. Res.*, *114*, A12, doi:10.1029/2009JA014333.
162. Burin des Roziers, E. (grad student), X. Li, D. N. Baker, T. A. Fritz, R. Friedel, T. G. Onsager, and I. Dandouras (2009), Energetic plasma sheet electrons and their relationship with the solar wind: A Cluster and Geotail study, *J. Geophys. Res.*, *114*, A02220, doi:10.1029/2008JA013696.

163. Sarris, T. E., W. Liu, K. Kabin, X. Li, S. R. Elkington, R. Ergun, R. Rankin, V. Angelopoulos, J. Bonnell, J. McFadden, K. H. Glassmeier, and U. Auster (2009), Characterization of ULF Pulsations by THEMIS, *Geophys. Res. Lett.*, **36**, L04104, doi:10.1029/2008GL036732.
164. Li, X., A. B. Barker, D. N. Baker, W. C. Tu, T. E. Sarris, R. S. Selesnick, R. Friedel, and C. Shen (2009), Modeling the deep penetration of outer belt electrons during the ‘Halloween’ magnetic storm in 2003, *Space Weather*, **7**, S02004, doi:10.1029/2008SW000418.
165. Sarris, T. E., A. N. Wright, and X. Li (2009), Observations and Analysis of Alfvén wave phasemixing in the Earth’s magnetosphere, *J. Geophys. Res.*, **114**, A01213, doi:10.1029/2007JA012660.
166. Tu, Weichao (grad student), X. Li, Y. Chen, G. Reeves, and M. Temerin (2009), Storm-Dependent Radiation Belt Electron Dynamics, *J. Geophys. Res.*, **114**, A02217, doi:10.1029/2008JA013480.
167. Liu, Wenlong (postdoc), X. Li, T. Sarris, C. Cully, R. Ergun, V. Angelopoulos, D. Larson, A. Keiling, K. H. Glassmeier, and U. Auster (2009), Observation and modeling of the injection observed by THEMIS and LANL satellites during March 23, 2007 substorm event, *J. Geophys. Res.*, **114**, A00C18, doi:10.1029/2008JA013498.
168. Sarris, T., X. Li, and H. J. Singer (2009), A Long-Duration Narrow-Band Pc5 Pulsation, *J. Geophys. Res.*, **114**, A01213, doi:10.1029/2007JA012660.
169. Zong Q.-G., X.-Z. Zhou, Y. F. Wang, X. Li, P. Song, D. N. Baker, T. A. Fritz, P. W. Daly, M. Dunlop, A. Pedersen (2009), Energetic electron response to ULF waves induced by interplanetary shocks in the outer radiation belt, *J. Geophys. Res.*, **114**, A10204, doi:10.1029/2009JA014393.
170. Shen, C., Z. J. Rong, X. Li, M. Dunlop, Z. X. Liu, H. V. Malova, E. Lucek, and C. Carr (2008), Magnetic configurations of magnetotail tilted current sheets, *Annales Geophysicae*, **26**, 3525-2543.
171. Xie, L., W. Tu, X. Li, and Z. Pu (2008), A Study on the new proton radiation belt formation and loss during the Halloween storm in 2003, *Chinese Journal of Geophysics*, **52**(5), P353.
172. Lui, A. T. Y., S. B. Mende, O. LeContel, W. Liu, H. Frey, V. Angelopoulos, D. G. Sibeck, K.-H. Glassmeier, J. P. McFadden, D. Larson, J. Bonnell, X. Li, M. Nose, and H. Singer (2008), Determination of the Substorm Initiation Region From a Major Conjunction Interval of THEMIS Satellites, *J. Geophys. Res.*, **113**, A00C04, doi:10.1029/2008JA013424.
173. Turner, Drew (grad student) and X. Li (2008), Radial gradients of phase space density of the outer radiation belt electrons prior to sudden solar wind pressure enhancements, *Geophys. Res. Lett.*, **35**, L18101, doi:10.1029/2008GL034866.
174. Cliver, E., K. Balasubramaniam, Nariaki Nitta, Xinlin Li, and Patrick S. McIntosh (2008), The Great Geomagnetic Storm of 9 November 1991: Origin in a Quiet Sun Region, *J. Geophys. Res.*, **114**, A00A20, doi:10.1029/2008JA013232.

175. Keiling, A., V. Angelopoulos, D. Larson, J. McFadden, C. Carlson, M. Fillingim, G. Parks, S. Frey, K.-H. Glassmeier, H. U. Auster, W. Magnes, W. Liu, and X. Li (2008), Multiple intensifications inside the auroral bulge and their association with plasma sheet activities, *J. Geophys. Res.*, *113*, A12216, doi:10.1029/2008JA013383.
176. Shen, C., Z. X. Liu, X. Li, M. Dunlop, E. Lucek, Z. J. Rong, Z. Q. Chen, C. P. Escoubet, H. V. Malova, A. T. Y. Lui, A. Fazakerley, A. P. Walsh, C. Mouikis (2008), Flattened Current Sheet and its Evolution in Substorms, *J. Geophys. Res.*, *113*, A07S21, doi:10.1029/2007JA012812.
177. Keiling, A., V. Angelopoulos, D. Larson, R. Lin, J. McFadden, C. Carlson, J. W. Bonnell, F.S. Mozer, K.-H. Glassmeier, U. Auster, S. Mende, H. Frey, A. Roux, O. LeContel, S. Frey, T. Phan, E. Donovan, C. T. Russell, I. Mann, W. Liu, X. Li, M. Fillingim, G. Parks, K. Yumoto, K. Shiokawa, and J. Raeder (2008), Correlation of substorm injections, auroral modulations, and ground Pi2, *Geophys. Res. Lett.*, *35*, L17S22, doi:10.1029/2008GL033969.
178. Angelopoulos, V., Sibeck, D., Carlson, C. W., McFadden, J. P., Larson, D., Lin, R. P., Bonnell, J. W., Mozer, F. S., Ergun, R., Cully, C., Glassmeier, K. H., Auster, U., Roux, A., LeContel, O., Frey, S., Phan, T., Mende, S., Frey, H., Donovan, E., Russell, C. T., Strangeway, R., Liu, J., Mann, I., Rae, J., Raeder, J., Li, X., Liu, W., Singer, H. J., Sergeev, V. A., Apatenkov, S., Parks, G., Fillingim, M., and Sigwarth, J. (2008), First Results from the THEMIS Mission, *Space Sci. Rev.*, doi: 10.1007/s11214-008-9378-4.
179. CAO, Jinbing, Juntao DUAN, Aiming DU, Yudian MA, Zhenxin LIU, G. C. ZHOU, Dongmei Yang, Tielong Zhang, Xinlin LI, Massimo Vellante, Henri REME, Iannis DANDOURAS, E. Lucek, C. M. Carr, and Qiugang Zong (2008), Characteristics of mid-low latitude Pi2 excited by Bursty Bulk Flows, *J. Geophys. Res.*, *113*, A07S15, doi:10.1029/2007JA012629.
180. Turner, Drew (grad student), and Xinlin Li (2008), Quantitative forecast of relativistic electron flux at geosynchronous orbit based on low energy electron flux, *Space Weather*, *6*, S05005, doi:10.1029/2007SW000354.
181. Sarris, T. E., T. M. Loto'aniu, X. Li, and H. J. Singer (2007), Observations at geosynchronous orbit of a persistent Pc5 geomagnetic pulsation and energetic electron flux modulations, *Annales Geophysicae*, *25*, 1653-1667, 2007.
182. Zong, Q.-G., X.-Z. Zhou, X. Li, P. Song, S. Fu, D. N. Baker, Z. Y. Pu, T. A. Frits, A. Korth, A. Balogh, and H. Reme (2007), Ultra-Low Frequency Modulation of Energetic Particles in the Dayside Magnetosphere, *Geophys. Res. Lett.*, *34*, L12105, doi:10.1029/2007GL029915.
183. Li, X., K. S. Oh, and M. Temerin (2007), Prediction of AL Index Using Solar Wind Parameters, *J. Geophys. Res.*, *112*, A06224, doi:10.1029/2006JA011918.
184. Shen, C., X. Li, M. Dunlop, Q. Q. Shi, Z. X. Liu, E. Lucek, and Z. Q. Chen (2007), Magnetic Field Rotation Analysis and the Applications, *J. Geophys. Res.*, *112*, A06211, doi:10.1029/2005JA011584.

185. Shen, C., M. Dunlop, X. Li, Z. X. Liu, A. Balogh, T. L. Zhang, C. M. Carr, and Q. Q. Shi (2007), New approach for determining the normal of the bow shock based on cluster 4-point magnetic measurements, *J. Geophys. Res.*, *112*, A03201, doi: 10.1029/2006JA011699.
186. Gannon, J. L. (grad student), X. Li, and D. Heynderickx (2007), Pitch Angle Distribution Analysis of Radiation Belt Electrons Based on CRRES MEA data, *J. Geophys. Res.*, *112*, A05212, doi:10.1029/2005JA011565.
187. Sarris, T. E. (postdoc), X. Li, and M. Temerin (2006), Simulating radial diffusion of energetic (MeV) electrons through a model of fluctuating electric and magnetic fields, *Annales Geophysicae*, *24*, 1-16.
188. Li, X., M. Temerin, B. T. Tsurutani, S. Alex (2006), Modeling of 1-2 September 1859 super magnetic storm, *Adv. Space Res.* *38*, 273-279.
189. Zheng, Y., A. T. Y. Lui, X. Li, and M. Fok (2006), Characteristics of 2-6 MeV electrons in the slot region and inner radiation belt, *J. Geophys. Res.*, *111*, A10204, doi:10.1029/2006JA011748.
190. Li, X., D. N. Baker, T. P. O'Brien, L. Xie, and Q. G. Zong (2006), Correlation between the inner edge of outer radiation belt electrons and the innermost plasmopause location, *Geophys. Res. Lett.*, Vol. 33, No. 14, L14107, 10.1029/2006GL026294.
191. Temerin, M. and X. Li (2006), Dst model for 1995-2002, *J. Geophys. Res.*, *111*, A04221, doi:10.1029/2005JA011257.
192. Burin des Rozières, E. (grad student) and X. Li (2006), Specification of >2 MeV geosynchronous electrons based on solar wind measurements, *Space Weather*, *4*, S06007, doi:10.1029/2005SW000177.
193. Li, X., D. N. Baker, M. Temerin, G. D. Reeves, R. Friedel, and C. Shen (2005), Energetic electrons, 50 keV – 6 MeV, at geosynchronous orbit: their responses to solar wind variations, *Space Weather*, *3*, S04001, doi:10.1029/2004SW000105.
194. Blake, J. B., R. Mueller-Mellin, J. A. Davies, X. Li, and D. N. Baker (2005), Global Observations of Energetic Electrons Around the Time of a Substorm on 27 August 2001, *J. Geophys. Res.*, *110*, A06214, doi:10.1029/2004JA010971.
195. Barker, A. B. (grad student), X. Li, and R. S. Selesnick (2005), Modeling the radiation belt electrons with radial diffusion driven by the solar wind, *Space Weather*, *3*, No. 10, S10003 10.1029/2004SW000118, 13 October 2005.
196. Gannon, J. L. (grad student), X. Li, and M. Temerin, Parametric Study of Shock-Induced Transport and Energization of Relativistic Electrons in the Magnetosphere, *J. Geophys. Res.*, *110*, A12206, doi:10.1029/2004JA010679, 2005.
197. Sarris, T. E., (postdoc) and X. Li (2005), Evolution of the dispersionless injection boundary associated with substorms, *Annales Geophysicae*, *23*, 877-884.

198. Li, X. (2004), Variations of 0.7-6.0 MeV Electrons at Geosynchronous Orbit as a Function of Solar Wind, *Space Weather*, 2, No. 3, S0300610.1029/2003SW000017.
199. Baker, D. N., S. G. Kanekal, X. Li, S. P. Monk, J. Goldstein, and J. L. Burch (2004), An extreme distortion of the Van Allen belt arising from the 'Halloween' solar storm in 2003, *Nature*, doi:10.1038/nature03116.
200. Li, X., M. Temerin, D. N. Baker, G. D. Reeves, D. Larson, and S. G. Kanekal (2003), The Predictability of the Magnetosphere and Space Weather, a feature article in EOS, AGU, 16 Sept, 2003.
201. Li, X., T. E. Sarris, D. N. Baker, W. K. Peterson, and H. J. Singer (2003), Simulation of energetic particle injections associated with a substorm on August 27, 2001, *Geophys. Res. Lett.*, 30, No. 1, 10.1029/2002GL015967.
202. Li, X., D. N. Baker, S. Elkington, M. Temerin, G. D. Reeves, R. D. Belian, J. B. Blake, H. J. Singer, W. Peria, G. Parks, Energetic particle injections in the inner magnetosphere as a response to an interplanetary shock, *J. of Atmospheric and Solar-Terrestrial Physics*, 65, Issue 2, 233-244, January 2003.
203. Shen, C., X. Li, M. Dunlop, Z. X. Liu, A. Balogh, D. N. Baker, M. Hapgood, and X. Wang (2003), Analyses on the Geometrical Structure of Magnetic Field in the Current Sheet Based on Cluster Measurements, *J. Geophys. Res.*, 108, No. A5, 10.1029/2002JA009577.
204. Obara, T., and X. Li (2003), Formation of new electron radiation belt during magnetospheric compression event, *Adv. Space Res.*, 31, Number 4, 2003.
205. Temerin, M. and X. Li (2002), A new model for the prediction of Dst on the basis of the solar wind, *J. Geophys. Res.*, 107, No. A12, 1472.
206. Baker, N. D., ..., X. Li, et al. (2002), Timing of magnetic reconnection initiation during a global magnetospheric substorm onset, *Geophys. Res. Lett.*, 29, No. 23, 10.1029/2002GL015539.
207. Sarris, T. E. (grad student), X. Li, N. Tsaggas, and N. Paschalidis (2002), Modeling Energetic Particle Injections in Dynamic Pulse Fields with Varying Propagation Speeds, *J. Geophys. Res.*, 107, 10.1029/2001JA900166.
208. Toivanen, P. K., D. N. Baker, ..., X. Li, et al. (2001), Reconciliation of the substorm onset determined on the ground, in the equatorial magnetosphere, and at the Polar spacecraft, *Geophys. Res. Lett.*, 28, 107.
209. Ganushkina, N. Y., ..., X. Li (2001), Formation of intense nose structures, *Geophys. Res. Lett.*, 28, 491.
210. Toivanen, P. K., D. N. Baker, ..., X. Li, et al. (2001), Plasma sheet dynamics observed by the Polar spacecraft in association with substorm onsets, *J. Geophys. Res.*, 106, No. A9, p. 19,117 (2000JA003020).

211. Li, X., D. N. Baker, S. G. Kanekal, M. Looper, and M. Temerin (2001), SAMPEX Long Term Observations of MeV Electrons, *Geophys. Res. Lett.*, **28**, 3827.
212. Li, X., M. Temerin, D. N. Baker, G. D. Reeves, and D. Larson (2001), Quantitative Prediction of Radiation Belt Electrons at Geostationary Orbit Based on Solar Wind Measurements, *Geophys. Res. Lett.*, **28**, 1887.
213. Li, X. and Michael A. Temerin (2001), The Electron Radiation Belt, (a solicited review paper) *Space Science Reviews*, **95**(1/2), 569.
214. Li, X., D. N. Baker, M. Temerin, W. K. Peterson, J. F. Fennell (2000), Multiple Discrete-Energy Ion Features in the Inner Magnetosphere: Observations and Simulations, *Geophys. Res. Lett.*, **27**, 1447.
215. Li, X., D. N. Baker, M. Temerin, G. Reeves, and R. Belian (1999), Auroral Substorm Origin Far Out in Magnetotail, Dispersionless Injection Simulations Suggest, a feature article in EOS, AGU, page 405, Sept. 7, 1999.
216. Li, X., D. N. Baker, M. Temerin, T. Cayton, G. Reeves, R. Selesnick, J. B. Blake, G. Lu, S. Kanekal, and H. Singer (1999), Rapid Enhancements of Relativistic Electrons Deep in the Magnetosphere During the May 15, 1997 Magnetic Storm, *J. Geophys. Res.*, **104**, 4467.
217. Li, X., D. N. Baker, M. Temerin, G. Reeves, and R. Belian (1998), Simulation of Dispersionless Injections and Drift Echoes of Energetic Electrons Associated with Substorms, *Geophys. Res. Lett.*, **25**, 3763.
218. Li, X., D. N. Baker, M. Temerin, T. Cayton, G. Reeves, T. Araki, H. Singer, D. Larson, R. Lin, and S. Kanekal (1998), Energetic electron injections into the inner magnetosphere during the Jan. 10-11, 1997 magnetic storm, *J. Geophys. Res.*, **104**(A3), 4467-4476.
219. Baker, D. N., T. Pulkkinen, X. Li, et al. (1998), Coronal Mass Ejections, Magnetic Clouds, and Relativistic Magnetospheric Electron Event: ISTP, *J. Geophys. Res.*, **103**, 17279.
220. Baker, D. N., T. I. Pulkkinen, X. Li, et al. (1998), A Strong CME-related magnetic cloud interaction with the Earth's magnetosphere: ISTP observation of rapid relativistic electron acceleration on May 15, 1997, *Geophys. Res. Lett.*, **25**, 2975.
221. Reeves, G. D., ..., X. Li, et al. (1998), The relativistic electron response at geosynchronous orbit during the January 1997 magnetic storm, *J. Geophys. Res.*, **103**, 17559.
222. Lu, G., ..., X. Li, et al. (1998), Global energy deposition during the January 1997 magnetic cloud event, *J. Geophys. Res.*, **103**, 11685.
223. Knipp, D. J., ..., X. Li, et al. (1998), An overview of the early November 1993 Geomagnetic storm, *J. Geophys. Res.*, **103**, 26193.
224. Baker, D. N., X. Li, J. B. Blake, and S. Kanekal (1998), Strong electron acceleration in the Earth's magnetosphere, *Adv. Space Res.*, **21**, 609.

225. Li, X., D. N. Baker, M. Temerin, T. Cayton, G. D. Reeves, T. Araki, H. Singer, D. Larson, R. P. Lin, S. G. Kanekal (1998), Energetic electron injections into the inner magnetosphere during the Jan. 10-11, 1997 magnetic storm, *Geophys. Res. Lett.*, **25**, 2561.
226. Li, X., D. N. Baker, M. Temerin, D. Larson, R. P. Lin, E. G. D. Reeves, M. D. Looper, S. G. Kanekal, and R. A. Mewaldt (1997), Are energetic electrons in the solar wind the source of the outer radiation belt? *Geophys. Res. Lett.*, **24**, 923.
227. Li, X., D. N. Baker, M. Temerin, T. Cayton, G. Reeves, R. Christensen, J. B. Blake, M. Looper, R. Nakamura, and S. Kanekal (1997), Multi-Satellite Observations of the Outer Zone Electron Variation During the 3-4 November 1993 Magnetic Storm, *J. Geophys. Res.*, **102**, 14123.
228. Baker, D. N., X. Li, et al. (1997), Recurrent geomagnetic storms and relativistic electron enhancements in the outer magnetosphere ISTP coordinated measurements, *J. Geophys. Res.*, **103**, 14141.
229. Li, X., H. R. Lewis, J. LaBelle, T.-D. Phan, and R. Treumann (1995), Characteristics of Ion Pressure Tensor in the Earth's Magneto sheath, *Geophys. Res. Lett.*, **22**, 667.
230. Hudson, M. K., A. D. Kotelnikov, X. Li, et al. (1995), Simulation of Proton Radiation Belt Formation During the March 24, 1991 SSC, *Geophys. Res. Lett.*, **22**, 3, doi:10.1029/95GL00009.
231. Denton, R. E., S. P. Gary, X. Li, et al. (1995), Low-Frequency Fluctuations in the Magnetosheath Near the Magnetopause, *J. Geophys. Res.*, **100**, 5665.
232. Denton, R. E., X. Li, and T.-D. Phan, Bounded Anisotropy Fluid Model for Ion Temperature Evolution Applied to AMPTE/IRM Magnetosheath Data, *J. Geophys. Res.*, **100**, 14925, 1995.
233. Witt, E., M. K. Hudson, X. Li, et al. (1995), Ponderomotive Effects on Distributions of O^+ Ions in the Auroral Zone *J. Geophys. Res.*, **100**, 12151, 1995.
234. Li, X. and M. Temerin (1993), Ponderomotive effects on ion acceleration in the auroral zone, *Geophys. Res. Lett.*, **20**, 13.
235. Li, X., I. Roth, M. Temerin, J. Wygant, M. K. Hudson, and J. B. Blake (1993), Simulation of the prompt energization and transport of radiation particles during the March 24, 1991 SSC, *Geophys. Res. Lett.*, **20**, 2423.
236. Li, X., M. K. Hudson, A. A. Chan, and I. Roth (1993), Loss of ring current O^+ ions due to interaction with Pc 5 waves, *J. Geophys. Res.*, **98**, 215.
237. Li, X. and Z. Z. Xu (1987), Filamentation Instability of Nonuniform Intense Laser Light in Plasmas, *Chinese Physics*, **7**, Issue 3.
238. Li, X., Z. Z. Xu, and W. Yu (1986), Filamentation of Intense Electromagnetic Radiation in a Nonuniform Plasma, *KEXUE TONGBAO* (Sci. Comm.), Academia Sinica, **31**, 709.

239. Li, X. and Z. Z. Xu (1985), Effect of Small-Scale DC Magnetic Fields on Filamentation in Laser-Produced Plasmas, *Optics Comm.*, 55, 338.

Peer-Refereed Monographs or Peer-Refereed Conference Proceedings Papers (The full contents of each paper were reviewed by two referees):

1. Zhao H, Teague W, Blum L, Li X, Cantilina J, Edgar W, Bishop T, Ramos P, Krantz S. "Design, Characterization, and Testing of HERT, a Miniaturized High-Energy-Resolution Relativistic Electron Telescope for CubeSats." SSC24-WIII-06 (38th annual Small Satellite Conference), August 05, 2024 (Published online July 17, 2024)
2. Li X, Kohnert R, Palo S, Selesnick R, Khoo L, Schiller Q, Zhang K, Cantilina J, Bauch E, Sims A, et. al. "Two Generations of CubeSat Missions (CSSWE and CIRBE) to Take on the Challenges of Measuring Relativistic Electrons in the Earth's Magnetosphere." (Small Satellite Conference, August 06, 2022 - August 12, 2022), <https://digitalcommons.usu.edu/smallsat/2022/all2022/152/>: Small Satellite Conference, August 09, 2022 (Published online August 04, 2022)
3. X. Li, R. S. Selesnick, H. Zhao, D. N. Baker, J. B. Blake, and M. A. Temerin (2021), Source, Loss, and Transport of Energetic Particles Deep Inside Earth's Magnetosphere ($L < 4$), Space Physics and Aeronomy Collection Volume 2: Magnetospheres in the Solar System, Geophysical Monograph 259, First Edition. Edited by Romain Maggiolo, Nicolas Andr, Hiroshi Hasegawa, and Daniel T. Welling. 2021 American Geophysical Union. Published 2021 by John Wiley & Sons, Inc. DOI: 10.1002/9781119507512.
4. Schiller, Q. (grad student), D. Gerhardt, L. Blum, X. Li, S. Palo (2014), Design and scientific return of a miniaturized particle telescope onboard the Colorado Student Space Weather Experiment (CSSWE) CubeSat, 35th IEEE Aerospace Conference, 8.1102.
5. D. N. Baker, S. G. Kanekal, X. Li, S. R. Elkington and H. Spence, "Radiation belt electron enhancements: History and new results from RBSP," 2013 US National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM), Boulder, CO, 2013, pp. 1-1. doi: 10.1109/USNC-URSI-NRSM.2013.6525065
6. Li, X., S. Palo, R. Kohnert, D. Gerhardt, L. Blum, Q. Schiller, D. Turner, W. Tu, N. Sheiko, and C. S. Cooper (2012), Colorado Student Space Weather Experiment: Differential flux measurements of energetic particles in a highly inclined low Earth orbit, in Dynamics of the Earth's Radiation Belts and Inner Magnetosphere, Geophys. Monogr. Ser., vol. 199, edited by D. Summers et al., 385404, AGU, Washington, D. C., doi:10.1029/2012GM001313.
7. Li, X. (2006), The role of radial transport in accelerating radiation belt electrons, AGU Monograph Series 167, 139, 10.1029/167GM13.
8. Xie, L., T. A. Fritz, Q. G. Zong, Z. Y. Pu, X. Z. Zhou, and X. Li (2006), Auroral equatorward boundary observed by the NOAA-17 satellite, *Advances in Geosciences*, Vol. 2, 219-228.

9. Gannon, J. L. (grad student) and X. Li (2005), Electron Phasespace Density Analysis Based on Test-particle Simulation of Magnetospheric Compression Events, AGU Monograph Series 156, page 205-214, 10.1029/156GM23.
10. Pulkkinen, T. I., N. Yu. Ganushkina, E. Donovan, X. Li, G. D. Reeves, C. T. Russell, H. J. Singer, and J. A. Slavin (2005), Storm-Substorm Coupling During 16 Hours of Dst Steadily at 150 nT, AGU Monograph Series 155, page 155-161, 10.1029/155GM18.
11. Baker, N. D., S. Elkington, X. Li, and M. Wiltberger, Particle Acceleration in the Inner magnetosphere, AGU Monograph 155, page 73-85, 10.1029/155GM09, 2005.
12. Baker, D. N. and X. Li (2003), Relativistic electron flux enhancements during strong geomagnetic activity, AGU monograph "Storm-Substorm Relationship", *Geophys. Monogr.* 142, 217-230, doi: 10.1029/142GM18, 2003.
13. Li, X., D. N. Baker, M. Temerin, J. B. Blake, and S. G. Kanekal (1996), Outer Zone Relativistic Electron Flux Variations Observed By SAMPEX During Nov. 1-8, 1993, *AGU Monograph* 97, *Radiation Belts: Model & Standards*, edited by J. F. Lemaire, D. Heynderickx, and D. N. Baker, 241.
14. Li, X., A. A. Chan, M. K. Hudson, and I. Roth (1991), Ring Current Ion Interaction with Micropulsations During the Recovery Phase of Geomagnetic Storms, *AGU Monograph 'Magnetospheric Substorms'*, edited by J. Kan, 64, 469.

Book Chapters:

1. Dedong Wang, Chongjing Yuan, Xinlin Li et al. (2024) Overview of the Physics Processes Controlling the Radiation Belts in the Solar System, *Radiation belts handbook (Physics throughout the solar system)*, Edited by Peter Kollmann and Alexander Drozdov, under review.
2. Li, X. (2013) Recent Advances in Space Weather Forecast Using Solar Wind as Input in *Advances in Space Physics*, page 309-335, Edited by Wing Ip, Zhenxing Liu, and Jiankui Shi, Publisher: Science in China Press, Beijing, China Year: 2013, ISBN 978-7-03-038623-6.
3. Li, X. (1998) Rapid Formation of New Radiation Belts due to Interplanetary Shocks in *Recent development in Space Physics*, page 48-85, Edited by Baowei Lui, Wing Ip, Zhenxing Liu, Publishers: Science in China Press, Beijing, China Year: 2001, ISBN 7-03-008998-7.

Non-Refereed Papers on Conference Proceedings and Newsletters:

1. Shumko M, Halford A, Breneman A, Klumpar D, Lessard M, Angelopoulos V, Marshall R, Johnson AT, Li X, Walsh B. "Recommendations on Funding Mission Operations and Historical Datasets." Vol. 55, Issue 3 (Heliophysics 2024 Decadal Whitepapers) (July 31, 2023). (Published online July 31, 2023)

2. Li, X., Drew Turner, Weichao Tu, and Cora Randall, Energetic Particles from a highly Inclined Constellation (EPIC), White paper to Academy of Science/Research Council/Decadal Survey 2010.
3. Elkington, S. and X. Li, MORE/ORBITALS: An international mission to advance radiation belt science, White paper to Academy of Science/Research Council/Decadal Survey 2010.
4. Kanekal, S. G., ... X. Li., ..., Heliospheric Particle Explorer: Advancing our Understanding of Magnetospheric, Solar Energetic Particle, and Cosmic Ray physics, White paper to Academy of Science/Research Council/Decadal Survey 2010.
5. Li, X. and M. Temerin (2004), Real-time solar wind data from ACE make accurate forecasts of magnetic storms a reality, *ACE News* # 86-Nov. 15, 2004.
6. Sarris, T. (postdoc) and X. Li (2004), Test-particle simulation of the injection region of energetic particles associated with substorms, *Proceedings of the 7th International Conference on Substorms*, ISSN 0782-6079, page 228-231.
7. Li, X. (2002), Radiation Belt Electrons and Substorm Injections, *International Conference on Substorms-6 Proceedings*, Ed. by R. M. Winglee, page 305.
8. Li, X. (2000), Modeling Particle Injections-Test Particle Simulations, *Proc. of the Fifth International Conference on Substorms*, 369, *ESA*.
9. Peterson, W. K., P. K. Toivanen, X. Li, D. N. Baker, A. Keiling, J. Wygant, C. A. Kletzing, and C. T. Russell (2000), Polar Observations of Two Pseudobreakup Events, *Proceedings of the Fifth International Conference on Substorms-5*, 409, *ESA*.
10. Kamide, Y., J.-H. Shue, X. Li, et al. (1998), Internally and externally triggered substorms: A case study of the January 10, 1997 events, *Substorm-4 Proceedings*, Edited by S. Kokubun and Y. Kamide, page 305-308.
11. Mason, G. M., ..., X. Li, et al., SAMPEX: NASA's First Small Explorer Satellite, 1998 IEEE Aerospace Conference, paper 006, review copy, 1998.
12. Li, X., M. K. Hudson, J. B. Blake, I. Roth, M. Temerin, and J. R. Wygant (1996), Observation and Simulation of the Rapid Formation of a New Electron Belt, *AIP Conference Proceedings*, 383, edited by G. D. Reeves, 109.
13. Hudson, M. K., A. Kotelnikov, X. Li, et al. (1996), Modeling formation of new radiation belts and response of ULF oscillations following March 24, 1991 SSC, *AIP Conference Proceedings*, 383, edited by G. D. Reeves, 119.
14. Baker, D. N., ..., X. Li, et al. (1996), An assessment of space environmental conditions during the recent Anik E1 spacecraft operational failure, *ISTP Newsletter*, 6, No. 2, 8.
15. Li, X., H. R. Lewis, J. LaBelle, T.-D. Phan, and R. Treumann, Velocity Moments of the Ion Distribution Function and Empirical Closure Relations in the Earth's Magnetosheath, *Proc. 1995 Cambridge Symposium/Workshop on Multiscale Phenomena in Space Plasmas*, edited by T. Chang, 311, 1995.

16. Hudson, M. K., A. Chan, X. Li, and I. Roth, Ring Current ion Interaction with Pc 5 Micropulsations, *Physics of Space Plasmas, SPI Conf. Proc. and Rep. Series, 10*, 263, 1991.

Invited talks at professional conferences and seminars at various institutes (contributed talks are not listed here):

1. The Ongoing Journey of REPTiles: Impactful Science Achieved and Yet to Come, an Keynote Speech Talk given at Macau International Forum on Space and Planetary Sciences, on 10 Jan 2025 (Qiugang Zong)
2. A New Electron and Proton Radiation Belt Discovered After the Magnetic Super Storm of May 10, 2024, an Invited talk given at Fall AGU, on 9 December 2024 (Harriet George).
3. Challenges of Understanding and Quantifying the Van Allen Radiation Belt Electron Dynamics, a Seminar given at National Space Science Center, Beijing, 1 November 2024 (Bingxian Luo)
4. Challenges of Understanding the Variability of the Van Allen Radiation Belts, an Invited Plenary Talk given at Space Weather Workshop held in Kunming, China, on 29 October 2024 (Bingxian Luo)
5. Measurements from REPTile-2 on CIRBE Revealed a New Temporary Electron Belt and Proton Belt that Formed During the Massive Magnetic Storm in May 2024, an Invited Talk given (on-line) to ISSI team on Precipitation of Energetic Particles from Magnetosphere and Their Effects on the Atmosphere, on 3 October 2024 (Dedong Wang)
6. Colorado Inner Radiation Belt Experiment (CIRBE), an Invited Talk given (on-line) at NASA SmallSat LEARN Forum, on 22 May 2024 (Luis H. Santos)
7. Colorado Student Space Weather Experiment (CSSWE) and Colorado Inner Radiation Belt Experiment (CIRBE), an Invited Talk given during the COSPAR Center of Excellence Ceremony at LASP, on 16 May 2024 (Amal Chandran)
8. CIRBE Mission: REPTile-2 Measurements and First Results, an Invited Talk given (on-line) to COSPAR-SGRB (Sub Group for Radiation Belt), on 3 April 2024 (Xiaochao Yang)
9. Unveiling Energetic Particle Dynamics in the Near-Earth Environment: Contributions from CubeSat Missions, a Colloquium given at University of Texas at Dallas, on 20 Feb 2024 (Xiao-Jia Zhang).
10. Challenges of Understanding the Variability of the Van Allen Radiation Belts, a seminar given at Southern University of Science and Technology, Shenzhen, China, Jan 2024.(Kaijun Liu)
11. Two generations of CubeSat missions (CSSWE and CIRBE) to take on the challenges of measuring relativistic electrons in the Earth's magnetosphere, a LASP Seminar given on 14 September 2023. (Kevin McGouldrick)

12. Challenges of Understanding the Variability of the Allen Radiation Belts, an Invited Report Review at IUGG/IAGA in Berlin, July 2023. (Simon Wing)
13. A Constellation of CubeSat Mission to Measure Energetic Electrons Over Two Orders of Magnitude of Energy Range (30keV–5MeV), an Invited Talk given at the 5th COSPAR Symposium in Singapore, April, 2023. (Amal Chandran)
14. Precipitation Loss of Energetic Electrons: A Critical Link to the Understanding and Quantification of their Acceleration Mechanisms in the Magnetosphere–Dual Cluster Mission, a virtual Seminar given for NASA/GSFC/Heliospheric Physics Division (Aaron Breneman) on 25 May 2022.
15. Recent Advances in Understanding Cosmic Rays and Their Relations to Earth's Radiation Belt, Contributions of Our CubeSat Missions and Future Plans, a Colloquium given at Department of Physics, Auburn University, on 14 January 2022. (Hong Zhao)
16. Two generations of CubeSat missions to take on the challenges of measuring relativistic electrons in the Earth's magnetosphere, an Invited presentation (virtual) given at COSPA/SGRB (Sub Group on Radiation Belt), on 16 March 2022 (Dan Baker)
17. Recent Advances in Understanding Cosmic Rays and Their Relations to Earth's Radiation Belt, Contributions of Our CubeSat Missions, a Colloquium given at Department of Physics, University of Helsinki, on 19 September 2022 (Emilia Kilpua).
18. On the future of radiation belt study and the opportunities and challenges of radiation belt observations in the post Van Allen Probes era, an Invited Talk given at NSF/GEM workshop, 22 June 2022, Honolulu, Hawaii, USA (Hong Zhao)
19. **Colorado Inner Radiation Belt Experiment (CIRBE)**, an Invited talk given at Van Allen Probes Science Working Group Meeting, on 24 September 2021 (invited by Dr. Sasha Ukhorskiy).
20. **Quantitative Forecast of MeV Electrons and Geomagnetic Indices**, an Invited talk given at Safespace Workshop held in Milo, Greece, in July 2021 (invited by Dr. Ioannis Daglis).
21. **Updates on Colorado Inner Radiation Belt Experiment (CIRBE)**, a seminar given (via Zoom) in REAL science seminar series, on 10 June 2021 (invited by Prof. Robyn Millan).
22. **Cosmic Rays, Solar Energetic Particles, and Solar Activity: How they relate to the Inner Radiation Belt Electrons and Protons**, an Invited talk given at the 4th PSTEP International Symposium (PSTEP-4) and the 2nd ISEE Symposium, Nagoya University, Nagoya, Japan, January 2020 (invited by Prof. Yoshi Miyoshi).

23. **On Relativistic Electrons in the Inner Belt and Slot Region: Inward Transport and Cosmic Ray Albedo Neutron Decay (CRAND) versus Various Wave Scatterings and Atmospheric Collisions**, an Invited talk given at VLF/ELF Remote Sensing of Ionospheres and Magnetospheres Workshop (VERSIM 2020), November, 2020 (invited by Prof. Y. Omura).
24. **Cosmic Rays, Solar Energetic Particles, and Solar Activity: How they relate to the Inner Radiation Belt Electrons and Protons**, a Seminar given at LASP on 3 September 2019 (invited by Dr. Marcin Pilinski).
25. **On the Inter-relations Between Cosmic Rays and Inner Radiation Belts**, an Invited talk given at Weihai Coupling Processes of Key Regions in Space Workshop, Weihai, Shangdong University, China, on 21 August 2019 (invited by Prof. Quanqi Shi)
26. **Colorado Student Space Weather Experiment (CSSWE)**, an Invited talk given at the NASA Technical Interchange Meeting (TIM) at NASA Ames Research Center, on 26 June 2019 (invited by Dr. Charles Norton).
27. **High Quality Sciences by CubeSat Missions and Future Potential**, an Invited talk given at EGU, Vienna, Austria, on 9 April (invited by Prof. Minna Palmroth).
28. **Quantitative forecasts and specifications of outer radiation belt electrons based on solar wind conditions**, an Invited talk at Space Weather Week Workshop in Boulder on 5 April 2019 (Invited by Dr. Jim Spann)
29. **Cosmic Rays, Solar Energetic Particles, Radiation Belts, and Their Inter-relations and Variations**, a Seminar given at Wuhan University of China on 19 March 2019 (invited by Prof. Binbin Ni).
30. **Colorado Student Space Weather Experiment (CSSWE)**, an Invited talk given at the Capital Hill (to the Congressional staff members, various Agency Representatives) on 26 Feb 2019 (Invited by University Space Research Association/Prof. Dan Baker).
31. **Cosmic Rays, Solar Energetic Particles, Radiation Belts, and Discovery by Colorado Student Space Weather Experiment (CSSWE) CubeSat**, a Seminar given at Department of Earth and Space Sciences Southern University of Science and Technology, Shenzhen, China on 17 Jan 2019 (Invited by Prof. Kaijun Liu)
32. **Yes, a 60-year-old mystery in space physics resolved, thanks to our first CubeSat (CSSWE) measurements**, a Seminar given at NOAA/Space Weather Prediction Center (SWPC) on 26 July 2018 (invited by Dr. Hazel Bain).

33. **The Sources for the Inner Radiation Belt-Revisited**, an INVITED talk given at the conference on Fundamental Physical Processes in Solar-Terrestrial Research and Their Relevance to Planetary Physics, at Kona, Hawaii, on 9 January 2018 (invited by Prof. Hui Zhang).
34. **Colorado Student Space Weather Experiment (CSSWE)**, an INVITED Talk given at Boulder Solar Day at NCAR on 15 March 2018 (invited by Dr. Derek Lamb).
35. **CubeSat: Inner Radiation Belt Experiment (CIRBE)**, an INVITED presentation on the project at NSF GEM workshop in Santa Fe, NM, on 21 June 2018 (invited by Dr. Weichao Tu).
36. **Quantitative Assessment of CRAND Contribution to the Relativistic Electrons in the Inner Belt and Slot Region**, an INVITED talk given at URSI meeting at Gran Canaria, Spain (Canary Islands) on 30 May 2018 (invited by Prof. Wen Li).
37. **Identification and Quantification of Cosmic-Ray Albedo Neutron Decay (CRAND) Contribution to the Relativistic Electrons in the Inner Belt and Slot Region**, an INVITED keynote talk given at Space Weather Conference at Mohe, China, hosted by National Space Science Center on 20 August 2018 (invited by Dr. Siqin Liu).
38. **How would a 60-year-old mystery in space physics be resolved, based on a student CubeSat (CSSWE) measurement?**, A seminar given at Wuhan University of China on 5 Feb 2018 (invited by Prof. Binbin Ni).
39. **Yes, a 60-year-old mystery in space physics resolved, thanks to our first CubeSat (CSSWE) measurements**, a keynote Seminar given at National Space Science Center, Chinese Academy of Sciences, Beijing, on 20 April 2018 (invited by Dr. Chi Wang).
40. **Yes, a 60-year-old mystery in space physics resolved, thanks to our first CubeSat (CSSWE) measurements**, invited by Maria Usanova, given at LASP, U. of Colorado Boulder, 18 Jan 2018.
41. **CubeSat: Inner Radiation Belt Experiment (CIRBE)**. Invited by Takeshi SAKANOI, given at Asia Oceania Geosciences Society (AOGS), Singapore, 10 August 2017.
42. **What have we learned about the energetic particle dynamics in the inner belt and slot region from Van Allen Probes and CSSWE missions?** Invited by Sebastian Bourdarie, given at European Geophysical Union (EGU) in Vienna, Austria, 24 April 2017.
43. **Two Generations of CubeSat in University of Colorado to Address Heliospheric Physics**. Colloquium, invited by Joe Lemaire, given at Royal Belgian Institute for Space Aeronomy (IASB-BIRA), Brussels, Belgium, 13 April 2017.

44. **Two Generations of CubeSat in University of Colorado to Address Heliospheric Physics**, per invitation of Weichao Tu, Department of Physics, University of West Virginia, 23 February 2017.
45. Seminar given in Wuhan University of China on October 17th of 2016, per invitation of Binbin Ni, entitled: **Two Generations of CubeSat in University of Colorado to Address Heliospheric Physics**
46. Seminar given at the Department of Physics and Astronomy of Dartmouth College on May 27th of 2016, per invitation of Mary Hudson, entitled: **What have learned about the Inner Radiation Belt From Van Allen Probes and CSSWE Missions?**
47. Seminar given at NOAA/SWPC on November 10th of 2016, per invitation of Eric Adamson, entitled: **What have we learned about the inner radiation belt and slot region from Van Allen Probes and CSSWE missions?**
48. Seminar given on August 26th of 2016 at the National Space Science Center, Chinese Academy of Science, in Beijing, per invitation of Chi Wang, entitled: **Renewed Understanding of the Inner Radiation Belt Particle Dynamics.**
49. Invited (by Jacob Bortnik) talk given at Versim and Radiation Belt workshop at Hermanus, South Africa on September 22nd of 2016, entitled: **What have we learned about the inner radiation belt from DEMETER, Van Allen Probes, and CSSWE missions?**
50. Invited (by Sebastien Bourdarie) talk at EGU on April 20th of 2016, entitled: **Penetration Depths of Energetic Electrons and Ions into the Inner Magnetosphere and Their Contributions to the Ring Current Energy Content,**
51. Invited (by Kanako Seki) talk given at an International Workshop held in Nagoya University, Japan, on March 22nd of 2016, entitled: **Recent Advances in Understanding Radiation Belt Dynamics in the Earths Inner Zone and Slot Region.**
52. Seminar given at LASP as Friends of Magnetospheres (FOM) series on Feb 23rd of 2016, per invitation of Allison Jaynes, entitled: **What have learned about the Inner Radiation Belt From Van Allen Probes and CSSWE Missions?**
53. Seminar given at LASP on Jan 29th of 2016 as the PI training series for Junior scientists, per invitation of Associate Director for Science, Bruce Jakosky, entitled: **How to manage a CubeSat mission.**
54. **Renewed Understanding of the Radiation Belt and Ring Current Particle Dynamics**, a seminar given at Beihang University, Beijing, China, July, 2015. *Wenlong Liu*

55. **Renewed Understanding of the Radiation Belt and Ring Current Particle Dynamics**, a seminar given at National Space Science Center, Academy of Science, Beijing, China, July, 2015. *Chao Shen*
56. **Generations of CubeSat in University of Colorado to Address Heliospheric Physics**, a seminar given at Wuhan University, Wuhan, China, March, 2015. *Binbin Ni*
57. **Generations of CubeSat in University of Colorado to Address Heliospheric Physics**, an INVITED talk given at AOGS, Singapore, August, 2015. *Andrew Yau*
58. **Renewed Understanding of Relativistic Electrons in the Inner Belt**, an INVITED talk given at International Workshop on Energetic Particle Processes of the near-Earth Space 17-23 May 2015 Paris, France. *Jean Francios Ripoll*
59. **Recent Advancements of Understanding of Relativistic Electrons in the Inner Belt**, an INVITED talk given at the Meeting of Americas, Montreal, Canada, May, 2015. *Shri Kanekal*
60. **Dynamics of Relativistic Electrons During Non-Storm Times**, an INVITED talk given at Geospace-2014 meeting at Rhodes, Greece, September, 2014. *Yannis Daglis*
61. **Three Generations of CubeSat in University of Colorado to Address Heliospheric Physics**, an INVITED talk given at COSPAR, Moscow, August, 2014. *Frdric Auchre*.
62. **Science Results and Lessons Learned from CubeSat: Colorado Student Space Weather Experiment (CSSWE)**, an INVITED talk given at COSPAR, Moscow, August, 2014. *Vincent Maget*
63. **Science Results from CubeSat: Colorado Student Space Weather Experiment (CSSWE)**, an INVITED talk given at AOGS, Sapporo, Japan, July, 2014. *Qiugang Zong*
64. **Status update on Colorado Student Space Weather Experiment (CSSWE)**, an INVITED talk at Van Allen Probes Science Work Group Meeting at APL, March, 2014. *Barry Mauk*
65. **Three Generations of CubeSat in University of Colorado to Address Heliospheric Physics**, a Seminar given at Air Force Research Lab, Albuquerque, NM, Nov 12, 2014. *Richard Selesnick*
66. **Three Generations of CubeSat in University of Colorado to Address Heliospheric Physics**, a Colloquium given at Department of Physics and Astronomy of Dartmouth College, September 26th, 2014. *Mary Hudson*
67. **CSSWE CubeSat- from Concept to Reality and its International impact**, a seminar given at Beihang University, China, July, 2014. *Jinbin Cao*

68. **CSSWE CubeSat- from Concept to Reality and its International impact**, a seminar given at Xi'an Technological University, China, June, 2014. *Yuhou Zhao*
69. **CSSWE CubeSat- from Concept to Reality and its International impact**, a seminar given at Peking University, China, June, 2014. *Suiyan Fu*
70. **Achievements and New Prospects of Our CubeSat Missions**, a seminar given at National Space Science Center of Chinese Academy of Sciences, June, 2014. *Chao Shen*
71. **Relativistic Electron and Proton Telescope integrated little telescope (REPTile), its design, manufacture, calibrations pre-flight and post-flight**, a seminar given at National Space Science Center of Chinese Academy of Science, Jan. 2014. *Yueqiang Sun*
72. **Tiny Satellite and its Big Impact**, a seminar about our CubeSat mission given at National Space Science Center of Chinese Academy of Science, Jan. 2014. *Yueqiang Sun*
73. **Colorado Student Space Weather Experiment (CSSWE) CubeSat Mission: a Success in Education, Engineering, and Science**, an INVITED plenary talk given at Global Chinese Space Weather Conference, Guilin, China, 11 November 2013. *Xueshang Feng*
74. **Tiny Satellite and its Big Impact**, a seminar given at Baoshan Institute, Yunnan, China, 6 November 2013. *Xinqi Li*
75. **New Science Results from Van Allen Probes (aka Radiation Belt Storm Probes) Mission**, an INVITED talk given at THE 2nd ASIA-OCEANIA SPACE WEATHER ALLIANCE WORKSHOP, Kunming, China, 4 November 2013. *Siqin Liu*
76. **Yes, solar wind controls geomagnetic activity! But to what extent?** a seminar given at LASP FOM (Friends of Magnetosphere), 22 October 2013. *Rob Wilson*
77. **Colorado Student Space Weather Experiment (CSSWE) CubeSat Mission: a Success in Education, Engineering, and Science**, a presentation given to the EAB (external advisory board) of Dept. of Aerospace Engineering Sciences, CU/Boulder, 18 October 2013. *Penny Axelrad*
78. **MinXSS: Miniature X-ray Solar Spectrometer- A Three-Axis Stabilized CubeSat for Conducting Solar Physics**, a seminar given at University of Science and Technology of China, Hefei, 11 October 2013. *Quanming Lu*
79. **Colorado Student Space Weather Experiment (CSSWE) CubeSat Mission: a Success in Education, Engineering, and Science**, a seminar given at University of Science and Technology of China, Hefei, 10 October 2013. *Quanming Lu*

80. **Van Allen Probe Mission (formerly known as Radiation Belt Storm Probes Mission)**, a seminar given at KASI (Korea Astronomy and Space Science Institute), Daejeon, Korea, 14 August 2013. *Junga Hwang*
81. **Colorado Student Space Weather Experiment (CSSWE) CubeSat Mission: a Success in Education, Engineering, and Science**, a seminar given at KARI (Korea Aerospace Research Institute), Daejeon, Korea, 14 August 2013. *Yu Yi*
82. **MinXSS: Miniature X-ray Solar Spectrometer- A Three-Axis Stabilized CubeSat for Conducting Solar Physics**, a seminar given at School of Space Research, Kyung Hee University, Korea, 13 August 2013. *Minhwan Jang*
83. **Van Allen Probe Mission (formerly known as Radiation Belt Storm Probes Mission)**, a seminar given at School of Space Research, Kyung Hee University, Korea, 12 August 2013. *Minhwan Jang*
84. **Colorado Student Space Weather Experiment (CSSWE) CubeSat Mission: a Success in Education, Engineering, and Science**, a seminar given at School of Space Research, Kyung Hee University, Korea, 12 August 2013. *Minhwan Jang*
85. **New results from the Colorado CubeSat and comparison with Van Allen Probes data**, an INVITED talk given at AOGS, Brisbane, Australia, June 2013. *Toni Lui*
86. **Colorado Student Space Weather Experiment (CSSWE) CubeSat Mission: a Success in Education, Engineering, and Science**, an INVITED plenary talk given at GEM workshop, Snowmass, Colorado, June 2013. *David Sibeck*
87. **New results from the Colorado CubeSat and comparison with Van Allen Probes data**, an INVITED talk given at Meeting of Americas, Cancun, Mexico, May 2013. *Weichao Tu*
88. **First Results from Colorado Student Space Weather Experiment (CSSWE): Energetic Particle Distribution in Near Earth Environment**, an INVITED talk given at *Space Weather Week*, Boulder, Colorado, on 16 April 2013. *Howard Singer*
89. **Science Results from Colorado Student Space Weather Experiment (CSSWE): Energetic Particle Distribution in Near Earth Environment**, an INVITED talk at EGU, Vienna, April 2013. *Ioannis Daglis*
90. **Telescope Measurements of Energetic Particles: from PET to REPT to REPTile**, a seminar given at Space Science Group at Caltech, on 1 April 2013. *Richard Mewaldt*
91. **Small Mission (CSSWE) Big Impact on Space Weather Research**, an INVITED talk given to Deep Space Exploration Society, Boulder, Colorado, on 16 March 2013. *Wayne Green*

92. **Small Mission (CSSWE) Big Impact on Space Weather Research**, a seminar given at NOAA/SWPC on 28 Feb 2013.
93. **Our First CubeSat Mission: Concept to Reality and Impact**, a seminar given at LASP, U. of Colorado at Boulder on 24 Jan 2013. *Andrew Colette*
94. **Colorado Student Space Weather Experiment (CSSWE) CubeSat Mission: a Success in Education, Engineering, and Science**, a seminar given at NCAR/HAO on 16 Jan 2013. *Mark Miesch*
95. **On the RBSP Mission and its Role in the Study of Relativistic Electron Energization**, an INVITED talk given at AOGS, Melbourne, Australia, on 15 August 2012. *Yuto Katoh*
96. **Colorado Student Space Weather Experiment (CSSWE): Differential Flux Measurements of Energetic Particles in a Highly Inclined Low Earth Orbit**, an INVITED talk given at AOGS, Melbourne, Australia, on 15 August 2012. *Andrew Yau*.
97. **Colorado Student Space Weather Experiment**, a seminar talk given at National Center of Space Weather, Chinese Academy of Sciences, in Beijing, on 1 June 2012. *Chi Wang*
98. **Current status of forecasting relativistic electrons at geosynchronous orbit and renewed understanding of the correlation between solar wind parameters and the enhancement of relativistic electrons** given at National Space Science Center, Chinese Academy of Science, Beijing, on 7 May 2012. *Siqin Liu*
99. **The best is yet to come: our CubeSat is to be launched in August**, a colloquium given at the Dept of Physics and Astronomy of Dartmouth College, on 30 March 2012. *Mary Hudson*
100. **Influence of Solar Wind on the Inner Magnetosphere: solar wind speed and magnetic field on the radiation belt electrons at geosynchronous orbit**, an INVITED talk at Inner Magnetosphere Conference at UCLA, on 21 March 2012. *Tuija Pulkkinen*
101. **CubeSat: Colorado Student Space Weather Experiment (CSSWE)**, INVITED talk at GEM Workshop, Santa Fe, on 29 June 2011. *Charles Swenson*
102. **CubeSat: Colorado Student Space Weather Experiment (CSSWE)**, INVITED talk at NASA/RBSP/Science Working Group meeting at APL, on 24 May 2011. *Robyn Millan*
103. **Behavior of MeV Electrons at Geosynchronous Orbit During the Last two Solar Cycle ==¿ Renewed Understanding**, INVITED talk at International Symposium From Solar Storm to Geomagnetic Storm, Shanghai, on 9 May 2011. *Q. G. Zong*

104. **Radiation Belt Electrons in the Magnetosphere**, INVITED review talk at Workshop on Inner Magnetosphere Dynamics, Beijing, on 6 May 2011. *Chao Shen*
105. **The Behavior of MeV Electrons at Geosynchronous Orbit During the Last two Solar Cycles: Renewed Understanding of the External Driver**, Seminar given at LASP, University of Colorado Boulder, on 1 March 2011. *Stefan Eriksson*
106. **Determining the loss of radiation belt electrons: What measurements and models are required?(What will our CubeSat do?)**, Seminar given at Dept. of Aerospace Engineering Sciences, University of Colorado Boulder, on 3 November 2010. *Jeff Forbes*
107. **CubeSat: Colorado Student Space Weather Expperient**, Seminar given at Peaking Univerisity, Beijing, August 31, 2010. *Suiyan Fu*
108. **Determining the Loss of Radiation Belt Electrons: What Measurements and Models are Required?** Seminar given at The Center for Space Science and Applied Research, Chinese Academy of Sciences, Beijing, August 31, 2010. *Shen Chao*
109. **Energetic electrons in the central plasmasheet and ULF in the inner magnetosphere: CLUSTER and THEMIS observations**, INVITED talk, at CLUSTER 10th Anniversary Workshop at CORFU, Greece, September of 2010. *Matt Taylor*
110. **Quantify the precipitation loss of radiation belt electrons observed by SAMPEX and Introduction of the USA NSF CubeSat Program**, at Chinese Space Weather Meeting in Shanghai, July 28-Aug 2, 2010. *Fengsi Wei*
111. **Long term observation of solar wind, inner magnetosphere, and radiation belt electrons**, at “ERG, SCOPE and Beyond” workshop at JAXA, ISAS (Sagamihara Campus), Japan, 2-5 Nov., 2009. *Yoshizumi Miyoshi*
112. **NASA Radiation Belt Storm Probe Mission**, at “ERG, SCOPE and Beyond” workshop at JAXA, ISAS (Sagamihara Campus), Japan, 2-5 Nov., 2009. *Yoshizumi Miyoshi*
113. **Latest Advancement on Space Weather Prediction**, at the Second International Space Weather Conference in Nanjing, China, October 17-21, 2009. *Chuan yi Tu*
114. **Variability of radiation belt electrons at Earth**, at European Planetary Science Congress, Potsdam, Germany, Sept., 2009. *Nicolas Andrew*
115. **Space Weather: why do we care?** Seminar given at Peking University, Beijing, May 20, 2009. *Lun Xie*
116. **Challenges in Space Weather**, Seminar given at The Center for Space Science and Applied Research, Chinese Academy of Sciences Beijing, May 21, 2009. *Shen Chao*

117. **Forecast of Relativistic Electron Flux at Geosynchronous Orbit With and Without Solar Wind Input**, at EGU, April 2009. *Norma Crosby*
118. **THEMIS, NASA's First Five Spacecraft Constellation Mission**, LASP Public Lecture, April 7, 2009. *Erin Wood*
119. **THEMIS Mission, a miracle! (low cost and high science return)**, Seminar given at LASP, September 11, 2008. *Phil Chamberlin*
120. **THEMIS Mission, a miracle! (low cost and high science return)**, Seminar given at The Center for Space Science and Applied Research, Chinese Academy of Sciences Beijing, July 10, 2008. *Shen Chao*
121. **Energetic Particle Injections Observed by THEMIS and Other Satellites**, AOGS (Asia Oceania Geosciences Society), June 17, 2008, Busan, Korea. *Xiaohua Deng*
122. **Quantitative Forecast of Relativistic Electron Flux at GEO Based on Measured Energetic Electron Flux Only**, Seminar given at The Center for Space Science and Applied Research, Chinese Academy of Sciences Beijing, March 31, 2008. *Shen Chao*
123. **Predicting Relativistic Electron Flux at GEO Based on Local Electron Flux only and/or Solar Wind Measurements**, Seminar given at Peking University, Beijing, March 28, 2008. *Lun Xie*
124. **What THEMIS can do for inner magnetospheric sciences during its extended mission phase**, THEMIS team meeting, Dec. 15 of 2007, at U. of California at Berkeley. *David Sibeck*
125. **Challenge in Space Weather**, at the 3rd Chinese CAWSES Space Weather Symposium, Aug. 7-10, 2007, Guiyang, China. *Xueshang Feng*
126. **Prediction of the Dst and AL Indices Using Solar Wind Parameters**, at the 3rd Chinese CAWSES Space Weather Symposium, Aug. 7-10, 2007, Guiyang, China. *Xueshang Feng*
127. **Simulating Radial Diffusion of Outer Radiation Belt Electrons**, AOGS, Aug. 2, 2007, Bangkok, Thailand. *Mei-Ching Fok*
128. **THEMIS' Contribution to Radiation Belt Sciences**, at the pre-THEMIS Launch Science Meeting, Radisson Resort at the Port, Cape Canaveral Florida, 2/13-14/07. *David Sibeck*
129. **Real-time forecast, how do we deal with real-time data gaps?** Workshop on Issues Regarding Real-Time Forecast, LASP, 2/8/07. *Michael Gehrmeier*

130. **THEMIS' Contribution to Radiation Belt Study**, THEMIS science workshop, Space Sciences Lab, UC Berkeley, December 15, 2006. *David Sibeck*
131. **The Role of Radial Transport in Accelerating Radiation Belt Electrons**, Seminar given at NCAR/HAO on December 6, 2006. *Mike Wiltberger*
132. **Radial transport in energizing radiation belt electrons in the magnetosphere**, COSPAR 36th, Beijing, China, July 16-23, 2006. *Obara*
133. **Sun, Solar Wind, and Geomagnetic Storms**, Western Pacific Geophysics Meeting, Beijing, July, 2006. *Jie Zhang*.
134. **On the relation between plasmasphere and outer Radiation belt electrons**, Western Pacific Geophysics Meeting, Beijing, July, 2006. *Mei-Ching Fok*.
135. **Relation Between Plasmasphere and Outer Radiation Belt**, Seminar given at The Center for Space Science and Applied Research, Chinese Academy of Sciences Beijing, 11 May, 2006. *Shen Chao*
136. **Solar Wind and Geomagnetic Storms**, International Living With a Star (ILWS) Workshop on "The Solar Influence on the Heliosphere and Earth's Environment: Recent Progress and Prospects," Goa, India, Feb. 19-24, 2006. *David Sibeck*.
137. **Magnetospheric Responses to the Solar Events**, The International Space Weather Conference, Macau, China, Nov. 21-25, 2005. *Jiusheng Yao*.
138. **Solar Wind Variations and Magnetospheric Responses**, The International Space Weather Conference, Macau, China, Nov. 21-25, 2005. *Fengsi Wei*
139. **Modeling of the deep inward transport of radiation belt electrons during Oct-Nov magnetic storms of 2003**, seminar given at Peking University, Beijing, 3 August, 2005. *Suiyan Fu*
140. **Modeling of the deep inward transport of radiation belt electrons during Oct-Nov magnetic storm of 2003**, Asia Oceania Geosciences Society Meeting, Singapore, 20-24 June, 2005. *Mei-Ching Fok*
141. **The Global Interactions Between the Solar Wind and Magnetosphere**, Asia Oceania Geosciences Society Meeting, Singapore, 20-24 June, 2005. *Suiyan Fu*
142. Seminar given at LASP magnetospheric group, **Energetic electrons, 50keV - 6MeV, at geosynchronous orbit: their responses to solar wind variations**, 15 February, 2005. *Yi-Jiun Su*

143. **Acceleration of Relativistic Electrons during Recurrent Storms**, AGU Chapman Conference on "Corotating Solar Wind Streams and Recurrent Geomagnetic Activity" in Manaus, Brazil, 6-12 February 2005. *Robert McPherron*
144. **Variations of Radiation Belt Electrons as a Function of Solar Wind: Their Prediction and Physical Mechanisms**, Asia Oceania Geosciences Society, Singapore, July 5-9, 2004. *Mannuel Grande*
145. **The Predictability of the Magnetosphere and Space Weather**, Asia Oceania Geosciences Society, Singapore, July 5-9, 2004. *Wing Simon*
146. **Predicting Radiation Belt Electron Fluxes and Space Weather Implications**, Spring AGU, Montreal, Canada, May 17-21, 2004. *S. G. Kanekal*
147. **The Predictability of the Earth's Magnetosphere and Space Weather Implication**, Seminar Given at Space Weather Laboratory, Chinese Academy of Sciences, Beijing, May 17, 2004. *Chao Shen*
148. Jan. 22, 2004, Seminar given at LASP, **The Predictability of the Magnetosphere and Space Weather**. *Laila Andersson*
149. Nov. 6, 2003, Seminar given at Space Environment Center, NOAA, Boulder, **Predictability of the Magnetosphere**. *Doug Biesecker*
150. April 6-11, 2003, EGS-EGU-AGU, Nice, France. **Enhanced physical understanding based on prediction of relativistic electrons using solar wind as input**. *Manuel Grande*
151. March 25-29, 2003, Advanced Research Workshop on Effects of Space Weather on Technology Infrastructure (ESPRIT), on the island of Rhodes, Greece. **Radiation Belt Forecasting**. *Yannis Daglis*
152. Jan. 6-8, 2003, Relativistic Electron Workshop at Maui, Hawaii. **Current Status of the Theory and Modeling of Radiation Belt Electrons in the Magnetosphere**. *J. B. Blake*
153. Oct. 28-29, 2002, GOES Energetic Particle Workshop at NOAA/SEC Boulder, Colorado. **Requirements for High-energy Electron Measurements**. *J. Mazur*
154. Oct. 10, 2002, Huntsville 2002, Astrophysical Particle Acceleration in Geospace and Beyond, at Chattanooga, Tennessee. **Acceleration of Relativistic Electrons in the Earth's Magnetosphere**. *J. Horwitz*
155. July 9-12, 2002 Western Pacific Geophysical Meeting, Wellington, New Zealand. **Long Term and Short Term forecast of Radiation Belt Electrons**. *Steve Curtis*

156. March 25-29, 2002, The Sixth International Conference on Substorms (ICS-6) University of Washington, Seattle, Washington. **Influence and Signatures of Energetic Particles in Substorm Development.** *R. Winglee*
157. Feb. 14, 2002, Seminar given at LASP, **SUN-EARTH CONNECTION: Quantitative Prediction of Radiation Belt Electrons in the Earth's Magnetosphere Based on Solar Wind Measurements.** *Greg Kopp*
158. Jan. 3, 2002, Seminar given at the Department of Aerospace Engineering Sciences of University of Colorado, **Quantitative Prediction of Radiation Belt Electrons in the Earth's Magnetosphere Based on Solar Wind Measurements** *Charbel Farhat.*
159. June 28, 2001, Seminar given at the Department of Geophysics, Peking University, Beijing, **Sun-Earth Connection.** *Z. Pu*
160. June 27, 2001, Seminar given at Center for Space Science and Applied Chinese Academy of Sciences, Beijing. **Sun-Earth Connection.** *Chao Shen*
161. June 27, 2001, Seminar given at Center for Space Science and Applied Research, Chinese Academy of Sciences, Beijing. **Quantitative Prediction of Radiation Belt Electrons in the Earth's Magnetosphere Based on Solar Wind Measurements.** *Chao Shen*
162. July 24-27, 2001, International Space Environment Conference 2001: Radiation Belt Science and Technology (ISEC 2001), at Queenstown, New Zealand. **Long Term Measurements of MeV Electrons by SAMPEX and Quantitative Prediction of MeV Electrons at Geostationary Orbit Using Solar Wind as the Only Input.** *Anthony Chan*
163. April 9-11, 2001, ISTEP workshop, at APL, Maryland. **Quantitative Prediction of Radiation Belt Electrons in the Earth's Magnetosphere Based on Solar Wind Measurements.** *D. N. Baker*
164. March 28, 2001, Invited Seminar Speaker on **Quantitative Prediction of Radiation Belt Electrons at Geostationary Orbit Based on Solar Wind Measurements** at Solar Terrestrial Environment Lab at University of Nagoya, Japan. *Y. Kamide*
165. March 14, 2001, AGU Chapman Conference on Storm-Substorm Relationship at Lonavala, India. **Quantitative Prediction of Radiation Belt Electrons at Geostationary Orbit Based on Solar Wind Measurements.** *S. Sharma*
166. Nov. 10, 2000, Seminar given at Center For Integrated Plasma Studies (CIPS)/U. of Colorado on **Quantitative Prediction of MeV Electrons at Geostationary Orbit on the Basis of Solar Wind Measurements.** *Chet Nieter*

167. Oct. 19, 2000, Seminar given at Space Environment Center/NOAA on **Quantitative Prediction of MeV Electrons at Geostationary Orbit on the Basis of Solar Wind Measurements**. *Tom Detman*
168. Sept. 28, 2000, COSPAR-Colloquium, Space Weather Study Using Multi-point Techniques, at Taipei, Taiwan, **Predicting MeV Electron Variations at Geosynchronous Orbit From a Physics-based Diffusion Model Using Solar Wind as the Only Input**. *J. Chao*
169. Aug. 31, 2000, Seminar given at LASP/U. of Colorado on **Quantitative Prediction of MeV Electrons at Geostationary Orbit on the Basis of Solar Wind Measurements**. *Amanda Hendrix*
170. May 19, 2000, International Conference on Substorms-5 at St. Petersburg, Russia. **Modeling Particle Injections—Test Particle Simulations**. *Dick Wolf*
171. April, 29, 2000, EGS 2000 at Nice France, **Energetic Particle Dynamics in the Earth's Magnetosphere**. *Manuel Grande*
172. Nov. 23, 1999, Invited Seminar Speaker on **Energetic Particle Dynamics in the Earth's Magnetosphere**, University of Alaska, Fairbanks. *A. R. Chowdhury*
173. Nov. 22, 1999, Invited Guest Lecturer on **The Mystery of Dispersionless Injection of Energetic Particles Associated With Magnetospheric Substorms**, University of Alaska. *A. R. Chowdhury*
174. June 21, 1999, NSF/GEM Workshop at Snowmass, Colorado, **Rapid Enhancements of Relativistic Electrons Deep in the Magnetosphere During the May 15, 1997 Magnetic Storm**. *Geoff Reeves*
175. June 22, 1999, NSF/GEM Workshop at Snowmass, Colorado, **Simulation of energetic particle injections due to interplanetary shock impact and substorm on Aug. 26, 1998**. *Mary Hudson*
176. Jan. 18, 1999, Relativistic Electron Workshop, Maui, Hawaii, **REVIEW Talk: Outer Radiation Belt Electrons**. *J. B. Blake*
177. Jan. 14, 1999, Space Environment Center/NOAA, Boulder, Colorado, **Dispersionless Injections and Drift Echoes of Energetic Particles Associated With Magnetospheric Substorms**. *Rodney Vierek*
178. Nov. 5, 1998, LASP, University of Colorado, Boulder, **Dispersionless Injections and Drift Echoes of Energetic Particles Associated With Magnetospheric Substorms**. *Dan Baker*

179. Nov. 3, 1998, IGPP, University of California, Los Angeles, **Dispersionless Injections and Drift Echoes of Energetic Particles Associated With Magnetospheric Substorms.** *Bob McPherron*
180. Oct. 25, 1998, Sixth Huntsville Modeling Workshop, Guntersville, Alabama, **REVIEW Talk: Recent Radiation Belt Enhancements.** *Bob Hoffman*
181. Sept. 24, 1998, ISTP European Science Workshop/The Inner Magnetosphere Session, **Keynote Address: Initial Enhancements of Relativistic Electrons in the Magnetosphere in Response to Solar Wind.** *Howard Singer and Geoff Reeves*
182. June 17, 1998, NSF/GEM Workshop at Snowmass, Colorado, **Simulation of Dispersionless Injections and Subsequent Drift Echos of Energetic Electrons Associated with Substorms.** *J. Birn*
183. June 16, 1998, NSF/GEM Workshop at Snowmass, Colorado, **TUTORIAL Talk: Radiation Belt Electrons: Current Understanding and Remaining Problems.** *Geoff Reeves*
184. June 15, 1998, NSF/GEM Workshop at Snowmass, Colorado, **Differences and causes of the initial enhancements of relativistic electrons during different storms.** *Geoff Reeves*
185. June 19, 1997, NSF/GEM Workshop at Snowmass, Colorado, **Source of Relativistic Electrons in the Magnetosphere: Present Knowledge and Remaining Questions.** *Mary Hudson*
186. June 18, 1997, NSF/GEM Workshop at Snowmass, Colorado, **Energetic electron injections into the inner magnetosphere during January 10-11, 1997 magnetic cloud event.** *Geoff Reeves*
187. March 7, 1997, Air Force Research Laboratory, Hanscom Field, MA 01731, **Source of Relativistic Electrons in the Magnetosphere: Present Knowledge and Remaining Questions.** *Greg Ginet*
188. March 6, 1997, Princeton Plasma Physics Laboratory, **Present Understanding of Radiation Belt Electrons in the Magnetosphere and Remaining Problems.** *Frank Cheng*
189. March 4, 1997, **Radiation Belt Electrons in the Magnetosphere: Present Knowledge and Remaining Problems.** *John Wygant*
190. Jan. 22, 1997, LASP, University of Colorado, **Solar Wind and Relativistic Electrons in the Earth's Magnetosphere.** *Dan Baker*
191. June 26, 1996, NSF/GEM Workshop at Snowmass, Colorado, **Solar Wind Effects on Relativistic Electrons in the Magnetosphere.** *Geoff Reeves*

192. May 7, 1996, Space Environment Center/NOAA, Boulder, Colorado, **The Source, Loss, Energization, and Transport of Relativistic Electrons in the Magnetosphere.** *Terry Onsager*
193. April 16, 1996, COSPAR Colloquium at Beijing, **Multi-Satellite Observations of the Outer Zone Electron Variation During the 1-10 November 1993.** *R. L. Xu*
194. March 7, 1996, Data Workshop for the National Space Weather Event, Nov. 3-4, 1993 magnetic storm, **Correlation between solar wind condition with enhancement of relativistic electrons in the magnetosphere.** *John Freeman*
195. March 6, 1996, Department of Space Physics and Astronomy, Rice University, **Formation of Radiation Belts in the Magnetosphere.** *Anthony Chan*
196. March 4, 1996, Front Range Branch AGU Annual Meeting, **Solar Wind Effects on Relativistic Electrons in the Magnetosphere.** *Dan Baker.*
197. Jan. 11, 1996, NSF/GEM GGCM Campaign/SEC Space Weather Workshop, Boulder, Colorado, **Rapid Loss of Outer Zone Electrons.** *Mary Hudson*
198. Oct. 18, 1995, Workshop on Radiation Belts: Model & Standards, Brussels, Belgium, Oct. 17-20, 1995, **Simulation of the Rapid Formation of a New Electron Radiation Belt During March 24, 1991 SSC.** *Joe Lemaire*
199. Oct. 5, 1995, LASP, University of Colorado, **New Radiation Belts in the Magnetosphere.** *Dan Baker*
200. May 15, 1995, Department of Physics, University of Alberta, Edmonton, Canada, **Formation of Radiation Belts in the Magnetosphere.** *Gordon Rostoker.*
201. Feb. 24, 1995, Cambridge Symposium-Workshop, Feb. 20-25, 1995-Bermuda, **Characteristics of Velocity Moments of the Ion Distribution Function in the Earth's Magnetosheath.** *Tom Chang*
202. Feb. 17, 1995, Physics Department, Auburn University, Auburn, Alabama, **New Radiation Belts in the Magnetosphere.** *Steve Knowlton*
203. Oct. 27 PM, 1994, High Altitude Observatory, NCAR, Boulder, Colorado, **New Radiation Belts in the Magnetosphere.** *Paul Song*
204. Oct. 27 AM, 1994, Space Environment Laboratory, NOAA, Boulder, Colorado, **Observation and Simulation of the Rapid Formation of a New Electron Radiation Belt During March 24, 1991 SSC.** *Howard Singer*

205. Oct. 25, 1994, Space and Atmospheric Sciences Division, Los Alamos National Laboratory, **Formation of New Radiation Belts During the March 24, 1991, SSC.** *Michelle Thomson*
206. Aug. 15, 1994, Taos Workshop on the Earth's Trapped Particle Environment, **Observation and Simulation of the Rapid Formation of a New Electron Radiation Belt During March 24, 1991 SSC.** *Geoff Reeves*
207. July 26, 1994, Western Pacific Geophysics Meeting, Hongkong, **Field-Aligned Energization of Ions by Ponderomotive Force.** *Tom Chang*
208. June 3, 1994, Workshop at Goddard Space Flight Center, **Simulation and Observation of Particle Energization During the March 24, 1991 SSC.** *David Stern*
209. Dec. 14, 1993, Air Force Research Laboratory (former AFGL), Hanscom Field, MA 01731, **Simulation of the Prompt Creation of the New Radiation Belt during the March 24, 1991 SSC.** *Greg Ginet*
210. Nov. 12, 1993, Herzberg Institute of Astrophysics, National Council of Canada, Ottawa, **Simulation of the Prompt Creation of the New Electron Radiation Belt during the March 24, 1991 SSC.** *Brian Whalen*
211. Oct., 1992, Institute for the Study of Earth, Oceans and Space, University of New Hampshire, **Ponderomotive Effects on Ion Acceleration in the Auroral Zone.** *Phill Isenberg*
212. Aug., 1992, Lockheed Palo Alto Research Laboratories, **Ponderomotive Effects on Ion Acceleration in the Auroral Zone.** *Dan Murphy*
213. April, 1992, Center for Space Physics, Rice University, **Ring Current Oxygen Ion Interaction with Micropulsations.** *Pat Reiff*
214. Mar., 1992, Institute for the Study of Earth, Oceans and Space, University of New Hampshire, **Loss of Ring Current O^+ Ions due to Interaction with Pc 5 Waves.** *Phill Isenberg*
215. Feb., 1992, Space Sciences Laboratory, University of California, Berkeley, **Loss of Ring Current O^+ Ions due to Interaction with Pc 5 Waves.** *Bob Lin*

Research Funding Received as PI: (for the following grants in which I am the PI. Unless specified, there are no funded co-investigators, 100% of the funds are for myself and my research group)

1. NSF/Magnetospheric Program
 Title: On the Energy-Dependent Deep (L less than 3) Penetrations of Energetic Electrons (10s of keV to multi-MeV)
 \$515,885, 05/1/2024-04/30/2027

2. NSF/Solar Terrestrial RAPID Program, Title: Refurbishing and Integrating REPTile-2 (Relativistic Electron and Proton Telescope integrated little experiment-2) into Emirates Mission to the Asteroid Belt (EMA), \$239,988, 11/1/23 - 10/31/25.
3. NASA/Future Investigators in NASA Earth and Space Science and Technology, PI. FI: Ben Hogan. The new FI: Declan O'Brien. Title: Investigation of a Novel Loss Feature of Multi-MeV Electrons in the Outer Radiation Belt, \$50,000; 9/01/2023 - 8/31/2025
4. NASA/H-TIDES/LCAS
Title: CubeSat: Inner Radiation Belt Experiment (CIRBE)
\$4.936M, with \$230K subcontracted to Air Force Research Lab. 08/13/2018-08/12/2025.
5. NASA/H-TIDeS/Flight Opportunity Study (FOS) Program, PI, Xinlin Li
Title: Dual Cluster Mission Concept Study
\$145,307, 2/7/22-2/6/26.
6. NASA/GI Program, PI, Xinlin Li
Title: Investigating the Inner Edge of Outer Radiation Belt Electrons Utilizing REPT PHA Data
\$553,262, 7/1/21-6/30/25.
7. NASA/H-TIDeS/Instrument Technology Development Program, PI, Xinlin Li
Title: Medium Energy Electron Telescope (MEET)
\$423,841, 6/1/20-5/31/24.
8. NSF/Magnetospheric Program
Title: On the Source and Loss of Inner Belt Electrons, \$352,180, 4/1/19 - 03/31/24.
9. NASA/LWS program
Title: Quantitative Forecasts and Specifications of Outer Radiation Belt Electrons Based on Solar Wind Conditions
\$407,119.00, with \$140K subcontracted to Computational Physics Institute (CPI).
05/01/2019-04/30/2022.
10. NASA/FINESST
Title: Characterizing the role of innermost plasmopause location in determining the initial enhancements of outer belt electrons (keV to MeV)
\$135,000, 9/1/18-8/31/21 (to support grad student Lengying Khoo)
11. NASA/FINESST
Title: Quantifying the Precipitation Loss of Energetic Electrons in the Radiation Belt
\$135,000, 9/1/17-8/31/20 (to support grad student Kun Zhang)

12. NASA/Guest Investigator program
 Title: On the Effectiveness of Inward Radial Diffusion in the Energization of Outer Belt Electrons - Based on Data from the Van Allen Probes and THEMIS Missions
 \$160,000, 07/01/17 - 06/30/20
13. NASA/NESSF
 Title: Electric field signatures of 10s to 100s keV electron injections deep into the inner magnetosphere
 \$60,000, 9/1/15-5/31/17 (to support grad student Sam Califf)
14. NSF/Base Program
 Title: Analysis and Modeling of the Data from CubeSat Colorado Student Space Weather Experiment
 \$345,000, 07/15/15-07/14/18.
15. NASA/HGI program
 Title: On The Precipitation Loss of Outer Belt Electrons
 \$329,958, 2/1/15-1/31/18.
16. CU/LASP Internal Seed Grant
 Title: System Engineering Study for a technology demonstration mission to L5 electron and proton telescope) for a 6U CubeSat
 \$50,000, 3/01/14-12/31/14.
17. NASA/Guest Investigator Program
 Title: Formation and decay of the inner radiation belt
 \$80,516, 2/01/14-1/31/17.
18. NASA/NESSF program
 Title: Sudden Enhanced Precipitation Loss of Radiation Belt Electrons
 \$60,000, 9/1/12-8/31/14 (to support graduate student Lauren Blum)
19. NSF/National Space Weather Program
 Title: COLLABORATIVE RESEARCH: Advancing Radiation Belt Forecasting With Data Assimilation and Machine Learning
 \$170,000 5/1/12-4/30/15.
20. NSF/CubeSat Program
 Title: CubeSat: Colorado Student Space Weather Experiment
 \$998,484 (\$195,418 is allocated to Dept. of Aerospace Engineering Sciences for Dr. Palo, a Co-PI on this project), 1/01/10-5/31/14.

21. NSF/Base Program
 Title: Acceleration of Radiation Belt Electrons: in situ vs inward radial transport
 \$302,300, 4/01/09-3/31/14.

22. NASA/Guest Investigator Program
 Title: Energetic Electron Dynamics in the Magnetosphere
 \$338,849, 5/01/09-4/30/14.

23. NASA/LWS TR&T Program
 Title: Loss of Outer Radiation Belt Electrons, a high priority of LWS/RBSP mission.
 \$274,618, 5/07/09-6/07/13.

24. NSF/GEM Program
 Title: Phase Space Density Gradient of Energetic Electrons at Geosynchronous Orbit During Sharp Solar Wind Pressure Enhancements
 \$154,025, 6/01/09-5/31/11.

25. CU/LASP Internal Seed Grant
 Title: Spaceflight Instrument Development: Miniaturizing REPT (relativistic electron and proton telescope) for NSF CubeSat
 \$15,000, 1/15/08-12/31/08.

26. NSF/Base Program
 Title: Quantification of Radial Diffusion in Energizing MeV Electrons in the Magnetosphere
 \$244,398, 3/31/06-4/1/09.

27. NSF/National Space Weather Program
 Title: Quantitative Forecast and Specification of Radiation Belt Electrons
 \$267,557, 7/15/05-7/14/09.

28. NASA/Living With a Star Program
 Title: Dynamics of Radiation Belt Electrons Associated with Solar Wind Variations
 \$223,871, 5/01/03-4/30/07.

29. NSF/Base Program supplement fund for supporting a graduate student
 Title: Source of Radiation Belt Electrons.
 \$30,000, 9/1/04-1/31/06.

30. NSF/Base Program
 Title: Source of Radiation Belt Electrons.
 \$228,730, 2/1/03-1/31/07.

31. NASA NRA-01-SEC-041
 Title: Solar Wind Fluctuations and Their Consequences on the Magnetosphere
 \$255,737, 3/1/01 - 2/28/05.
32. NASA/Living With a Star Program/EPO supplement fund, 75% for supporting Co-I: Emily CoBabe-Ammann of LASP and 25% sub-contracted to NASA/Langely Center.
 \$45,000, 5/01/03-4/30/06.
33. NSF/GEM Program
 Title: Detailed study of the magnetic storms selected for GEM Inner Magnetosphere and Storms Campaign
 \$150,000, 6/1/01-5/31/04.
34. NASA NRA-99-OSS-01
 Title: Energization and Loss of Outer Radiation Belt Electrons.
 \$23,000, 7/15/03-7/14/04.
35. NASA NRA-99-OSS-01
 Title: Energization and Loss of Outer Radiation Belt Electrons.
 \$127,578, 7/15/00-7/14/03.
36. NSF/GEM, ATM-9901085
 Title: Energetic Particle Dynamics During Geomagnetic Storms and Magnetospheric Substorms
 (supplement fund for undergraduate research experiences)
 \$5,000, 10/1/00-9/30/01.
37. NSF/GEM, ATM-9901085
 Title: Energetic Particle Dynamics During Geomagnetic Storms and Magnetospheric Substorms.
 \$123,070, 10/1/99-9/30/02.
38. NSF/Base Program
 Title: Source of Radiation Belt Electrons.
 \$122,311, 10/1/99-9/30/02.
39. NASA NRA-98-OSS-01
 Analyzing the Loss, Energization, and Transport of Energetic Electrons in the Magnetosphere.
 \$40,500, 5/15/99-5/14/00.
40. Lockheed Martin
 Title: Modeling of energetic ion dynamics associated with substorms.
 \$15,000, 1/1/98-12/31/98.

41. NASA NRA-95-OSS-01
Analyzing the Loss, Energization, and Transport of Energetic Electrons in the Magnetosphere.
\$233,900, 5/15/96–5/14/99.
42. NSF/GEM
Title: Modeling Energetic Particle Injections During Geomagnetic Storms and Magnetospheric Substorms
(supplement fund for undergraduate research experiences).
\$5,000, 6/15/97–6/14/98.
43. NSF/GEM
Title: Modeling Energetic Particle Injections During Geomagnetic Storms and Magnetospheric Substorms.
\$100,087, 6/15/96–6/14/99.

Research Funding Received as Co-I:

1. NSF/GEM program, Co-I Title: Collaborative Research: GEM: Quantifying the Contribution of Off-Equatorial ULF Waves on Radial Diffusion in the Radiation Belts. PI: Theodore Sarris
\$432,033, 4/01/2023 - 3/31/2026, Commitment: 1 month/yr
2. NASA/H-TIDeS/Instrument Technology Development Program: The miniaturized High-Energy-Resolution relativistic electron Telescope (HERT), PI: Hong Zhao of Auburn University; Institute PI: Lauren Blum.
\$717,922, 9/1/2021 - 8/31/2023.
3. NASA/LWS/RBSP/Energetic Particle, Composition, and Thermal Plasma (ECT) instrument suite, PI: Harlan Spence; Institute PI: Dan Baker.
\$14,953,478 + unknown amount for FY 2017-2020, 12/1/06-10/31/20. I was helping to develop the relativistic electron and proton telescope (REPT) and involved with data analysis and modeling.
4. NASA/LWS/RBSP/Electric Field Instrument (EFI), PI: John Wygant; Institute PI: Bob Ergun.
\$3,903,075 + unknown amount for FY 2017-2020, 12/1/06/-10/31/20. I was helping to specify the measurement requirement in order to achieve the definitive science objectives and involved with data analysis and modeling.
5. NASA/MIDEX, Time History of Events and Macroscale Interactions During Substorms (THEMIS),
PI: Vassili Angelopoulos; Institute PI: Robert Ergun.
\$3,513,362 + unknown amount, 6/15/02–9/30/25. My current portion of the funding has been for partially supporting a graduate student, or a research associate.

6. NASA/Heliophysics/Geospace Science/Transport of radiation belt electrons via magnetospheric ULF waves in a realistic geomagnetic field, PI: Scot Elkington
\$539,397, 3/1/09-2/28/13.
7. CU Engineering Excellence Fund/A Vertically Integrated Picosatellite Design Laboratory for Projects Based Learning, PI: Scott Palo
\$29,657, 2010-2011.
8. NASA/LWS/RBSP/Mission of Opportunity Radbelt Explorer (MORE), PI: Dan Baker
\$1.5 Million, 12/1/06-12/31/09, for phase A study. As the Deputy-PI, I led the task of completing the Science Requirement Document (SRD).
9. NASA/UNEX, Inner Magnetosphere Explorer (IMEX), PI: John Wygant
\$293,961, 10/15/98-10/31/01, for Phase A study. My basic duty was to attend the weekly meeting with engineers to bridge between the science requirements and engineering feasibility. The project was cancelled after Phase A study due to the uncertainties of the launch vehicle.
10. NASA/SMEX, Solar, Anomalous, and Magnetospheric Particle Explorer (SAMPEX),
PI: Dan Baker
\$1,351,519, 8/15/94-8/31/07. Funding received so far is \$1,301,519 and the rest (50K) covered up to 8/31/07. My portion of the funding varied year to year, ~\$10k-60k/yr. Now the NASA/SAMPEX flight mission was already ended but the data are still being analyzed.

Research Funding Received as a Team Member:

1. NSF/Center for Integrated Space Weather Modeling (CISM), PI: Dan Baker,
\$4,608,900, 8/1/03-7/31/12. My portion of the funding varied year to year, ~\$30k-80k/yr.
2. ESA&NASA/CLUSTER/RAPID, PI at CU: Dan Baker
\$951,237, 1/1/02-12/16/10. My portion of this funding varied year to year, ~\$5k-60k/yr.
3. NASA/Polar/CEPPAD, PI: Dan Baker
\$1,067,000, 1/15/02-7/31/08. My portion of the funding varied year to year, ~\$5k-20k/yr.

TEACHING

Co-Taught ASEN 2702 (Introduction to Thermodynamics and Aerodynamics), 362 students, in Fall 2024.

Senior Design Teams (total three, 11-12 students in each team) advisor, in Fall 2024 and Spring 2025

Taught ASEN 3113 (Thermodynamics and Heat Transfer) alone, 160 students, in Fall 2022.

Taught ASEN 3113 (Thermodynamics and Heat Transfer) alone, 137 students, in Fall 2021.

Taught ASEN 3113 (Thermodynamics and Heat Transfer) alone, 119 students, in Fall 2020.

Taught ASEN 3113 (Thermodynamics and Heat Transfer) alone, 121 students, in Fall 2019.

Taught ASEN 3113 (Thermodynamics and Heat Transfer) alone (for lecture and design lab), 191 students, in Fall 2018.

Taught ASEN 3113 (Thermodynamics and Heat Transfer) alone, 150 students, in Fall 2017.

Taught ASEN 3113 (Thermodynamics and Heat Transfer) alone, 100 students, in Fall 2015.

Taught ASEN 5335 Aerospace Environment in the Spring of 2015.

Taught ASEN 4018 (senior design) for 2014-2015.

Taught ASEN 5018-6028: Spaceflight Hardware Design (I&II) since Fall of 2010, until Fall of 2014.

Taught ASEN 3113 (Thermodynamics and Heat Transfer) alone, 88 students in Fall 2012 and 101 students in 2015.

Taught ASEN 4018 (senior design) for 2010-2012.

Taught ASEN 3113 (Thermodynamics and Heat Transfer) alone, 79 students in Fall 2008.

Created (with Prof. Palo) a new two-semester graduate course, ASEN 5519-6519: Spaceflight Hardware Design, which was taught in Spring and Fall of 2007 (course rating 5.9 and instructor rating 5.9). This course was taught again (with a different hardware project) in Spring (course rating 3.9 and instructor rating 4.6), Fall of 2008 and 2009, Spring of 2010.

Developed and taught (Fall 06) ASEN 5050: Space Flight Dynamics (course rating 4.5 and instructor rating 4.4)

Developed and taught (Fall 01, Spring 03; 07; 15) ASEN 5335.

Revamped and taught (Fall 02, Spring 03, 04, 05, 06) ASEN 4010: Introduction to Space Dynamics (course rating B-, A, B+, B+, B and instructor rating B, A, B+, B+, B).

Developed and taught (Fall 05) ASEN 3113: Thermodynamics and Heat Transfer (Course rating B+ and instructor rating A).

Taught (Fall 03, 04) ASEN 2002: Introduction to Thermodynamics and Aerodynamics (course rating B+, B and instructor rating A, B).

Ph.D. supervision completed

Daniel Moorer (co-supervised with Dan Baker), 6/00, "Modeling High-Energy Electron Flux in the Outer Radiation Belt", Dept. of Aerospace Engineering Sciences, University of Colorado Boulder.

Theodore Sarris (co-supervised with N. Tsaggas), 6/03, "Energization of Hot Plasma Popu-

lations in Dynamic Magnetic Fields”, Dept. of Electronic Engineering, Demokritus University of Thrace, Xanthi, Greece.

Lun Xie (co-supervised with Z. Y. Pu), 01/05, “Research on the Multiscale Dynamics of the Radiation Belt”, Dept. of Geophysics, Peking University, Beijing, China.

Jennifer Gannon (Primary Advisor), 12/05, “Energetic Electron Dynamics in the Magnetosphere,” Dept. of Physics, University of Colorado Boulder.

Wenlong Liu (co-supervised with Suiyan Fu), 12/06, “The variations of N^+ in the ring current during magnetic storms,”, School of Earth and Space Sciences Peking University, Beijing, China.

Edward Burin des Rozières (Primary Advisor), 5/09, Dept. of Aerospace Engineering Sciences.

Drew Turner (Primary Advisor), 12/10, Dept. of Aerospace Engineering Sciences.

Weichao Tu (Primary Advisor), 5/11, Dept. of Aerospace Engineering Sciences.

Rob Redmond (Primary Academic Advisor), 5/12, Dept. of Aerospace Engineering Sciences.

Bingxian Luo (Primary Research Advisor), 5/12, The National Space Science Center, Chinese Academy of Sciences, Beijing.

Lauren Blum (Primary Advisor), 6/14, Dept. of Aerospace Engineering Sciences.

Quintin Schiller (Primary Advisor), 8/15, Dept. of Aerospace Engineering Sciences.

Hong Zhao (Primary Advisor), 12/15, Dept. of Aerospace Engineering Sciences.

James Mason (Primary Academic Advisor), 5/16, Dept. of Aerospace Engineering Sciences.

Sam Califf (Primary Advisor), 11/16, Dept. of Aerospace Engineering Sciences.

Kun Zhang (Primary Advisor), 8/20, Dept. of Aerospace Engineering Sciences.

Leng Ying Khoo (Primary Advisor), 12/21, Dept. of Aerospace Engineering Sciences.

Ben Hogan (Primary Advisor), 12/23, Dept. of Aerospace Engineering Sciences.

Daniel de Silva (Primary Academic Advisor; Research Advisor: Scot Elkington), 05/24, Dept. of Aerspase Engineering Sciences.

Ph.D. supervision in progress

Gabi Gonzalez (Primary Academic Advisor), Dept. of Aerspase Engineering Sciences.

Aspen Davis (Primary Academic Advisor), Dept. of Aerspase Engineering Sciences.

Misty Chien (Primary Advisor), Dept. of Aerspase Engineering Sciences.

Wesley Martin (Primary Advisor), Dept. of Aerspase Engineering Sciences.

Ziye Zhang (Primary Advisor), Dept. of Aerspase Engineering Sciences.

Yang Mei (expected 2026, Primary Advisor), Dept. of Aerspase Engineering Sciences.

Declan O'Brien (expected 2027, Primary Advisor), Dept. of Aerspase Engineering Sciences.

M.S. supervision completed

Edward Burin des Roziere, 12/05, Dept. of Aerospace Engineering Sciences.

Austin Barker, June of 2005. Austin was going for his Ph.D. degree (he passed Ph.D. preliminary exam and was preparing for his Ph.D. comprehensive exam). Unfortunately he died on 28 May 2005 from a rock climbing accident. He was awarded a posthumous M.S. degree.

Weichao Tu, 5/08, Dept. of Aerospace Engineering Sciences.

Drew Turner, 5/08, Dept. of Aerospace Engineering Sciences.

Michael Klapetzky, 1/10, Dept. of Aerospace Engineering Sciences.

Dongwon Lee, 5/10, Dept. of Aerospace Engineering Sciences.

Quintin Schiller, 12/11, Dept. of Aerospace Engineering Sciences.

Ian Barry, 5/13, Dept. of Aerospace Engineering Sciences.

Samantha Liner, 5/14, Dept. of Aerspase Engineering Sciences.

Sierra M. Flynn, 11/17, Dept. of Aerospace Engineering Sciences.

Elise Rimsa, 5/20, Dept. of Aerspase Engineering Sciences.

Jared Cantilina, 12/21, Dept. of Aerspase Engineering Sciences.

Served on the Ph.D. thesis committee of the following students in addition to those mentioned above

Niescja E. Turner (Ph.D. in 6/00)
 Joshua Rigler (Ph.D. in 9/04)
 Kim Cierpik (Ph.D. in 5/05)
 Phil Chamberlin (Ph.D. in 12/05)
 Brian Poller (Ph.D. in 5/09)
 David Gerhardt (Ph.D. in 1/14)
 Ethan Peck (Ph.D. in 11/14)
 Leela O'Brien (Ph.D. in 05/17)
 Alex Barrie (Ph.D. in 05/18)
 Grant Berland (Ph.D. in 7/23)

Postdoctoral supervision

Ben Hogan, 1/24 - 2/24
 Lengying Khoo, 1/22 - 4/22
 Zheng Xiang, 3/18 - 3/20; 11/23 - present
 Allison Jaynes, 2/13 - 12/15
 Bingxian Luo, 12/12 - 3/13
 Weichao Tu, 5/11 - 1/12
 Wenlong Liu, 4/07 - 9/10
 Theodore Sarris, 6/03 - 11/06.

SERVICE

Service to the Research Community

- Served on a NSF review panel (virtual), which lasted four days in April of 2024.
- Chaired on a NASA/Heliophysics-Theory-Modeling-Simulation Program review panel (virtual), which lasted four and half days in May of 2023.
- Served on a NASA/H-FOS (Flight Opportunity Study) review panel (virtual) November of 2022, which lasted four days.
- Served on a red team reviewer for NASA/MIDEX proposal competing for Phase B, 2021.
- Served on a NASA/H-FORT (Step-1) review panel, a total 5 days full time work with another dozen of reviewers, and completed the task professionally, 2020.
- Chaired a NASA/LWS review panel, working inside a hotel on University of Maryland Campus for 5 days with another dozen of reviewers, and completed the task professionally, 2019.
- Co-Convened a special session, entitled "New Perspectives on Earth's Inner Magnetosphere from Multipoint Satellite Observations and Data-ingestive Modeling" at AOGS in Singapore, 28 July - 2 August 2019
- Served as a panelist in NASA sponsored Technical Interchange Meeting (TIM) at NASA

Ames Center to discuss Navigating SmallSat Development: Where to Begin and What to Expect, on 25 June 2019.

- Per invitation of Universities Space Research Association (USRA), presented our work, published in *Nature*, at Capital Hill sponsored by USRA, and served as a panelist in the discussion why we should increase the research funding for Universities in order to provide more hand-on opportunities for students, in Feb 2019.

- Per invitation of Geological Society of America, presented our work, published in *Nature*, at the exhibit at Capital Hill sponsored by the Coalition of National Science Funding (CNSF). Our exhibition entitled: "Yes, a 60-year-old mystery in space physics resolved, thanks to our student satellite" was well attended by Congressmen, Congressional staff members, NSF leaders, and others, 2018

- Chaired a NASA-review panel, working inside a hotel near Washington DC for 4 days with another dozen of reviewers, and completed the task professionally, 2018.

- As co-conveners of the AGU Chapman Conference on Radiation Belt Dynamics, we also proposed to have special issue of *JGR* to publish results relevant to the Conference topic. Our proposal was accepted and all co-conveners act as a guest editor for this special *JGR* issue in 2018.

- Served as a co-convener for AGU Chapman Conference in 2018, on Radiation Belt Dynamics. Each Co-convener wrote one chapter of the proposal and pre-proof read one other chapter of the proposal. We also had several tele-conferences and many email exchanges to discuss how to run this conference effectively, which commenced in early March of 2018 in Portugal, with over 120 participants. The meeting has been a great success.

- Served as a co-convener for a special session in AOGS 2019: New Perspectives on Earths Inner Magnetosphere from Multipoint Satellite Observations and Data-ingestive Modeling. AOGS 2019 is to be held in Singapore in July.

- Served as the leading convener for a special session in AOGS 2018: The Responses of Earths Inner Magnetosphere to Extreme Solar Events.

- Served as a co-convener proposed for a special session in Fall AGU 2017: Radiation belt dynamics in the Earth's inner zone and slot region. The proposed session was combined with another session.

- Served as a co-convener for a special session in Fall AGU 2016: Radiation belt dynamics in the Earth's inner zone and slot region.

- Chaired a NASA review panel in November of 2016 in Washington DC, which lasted four days.

- Co-Chaired a special oral session and poster session in Fall AGU on December 15th, 2016.

- Wrote numerous letters in 2016-2017 for colleagues who applies for faculty jobs and who were reviewed for tenure.

- Served on the Program Advisory Committee for Space Physics Research Facility (SPRF) being built at Harbin Institute of Technology (HIT), China. The activity of 2015 included traveling there for 3 days and worked with other committee members to complete the required Review Report.

- Served as a co-convenor for a proposed AGU Chapman Conference in 2017, on Radiation Belt Dynamics. Each Co-convenor wrote one chapter of the proposal and pre-proof read one other chapter of the proposal. The proposal has been accepted by AGU. The Chapman Conference is scheduled to commence in early March of 2018.

- Served as a co-convenor for a special session in Fall AGU 2015: Radiation belt dynamics in the Earth's inner zone and slot region.

- Served as a local co-convenor for the L5 Consortium Meeting, which was held at LASP during 2-4 December 2014.

- Served on LANL/IGPPS external review board, meeting at LANL during June 10-11, 2013, numerous proposals were reviewed prior to the on-site meeting.

- Served on NASA/Heliophysics Roadmap committee, the charge is to construct a strategic plan, based on the Decadal Survey, to guide the implementation of critical science in the NASA/heliophysics program. We have had numerous in-person meetings and telecons since 2012, and continue.

- Served as an Editor for JASS (Journal of Astronomy and Space Sciences), an official journal of the Korean Space Science Society, 2014 -

- Served on Editorial Committee of J. of Chinese Space Sciences, 2008-2014. The duties included to recommend suitable papers submitting to the journal, to review some manuscripts as a referee, to make suggestions to improve the editorial work, etc.

- Served as an Associate Editor for Journal of Geophysical Physics, JGR, (Space Physics), 2008-2014. As part of the duty, reviewed a great number of controversial manuscripts, meaning that the authors and one of the two reviewers have irreconcilable opinions about the manuscript.

- Team member on NASA/LWS/RBSP "Tiger Team", a splinter group to do focused work on providing an objective set of criteria (based on mapping to the Radiation Belt science objectives and approaches used to bring closure to those objectives) for deciding what the RBSP orbit should be. Weekly telecon and "homework assignments" for over a month (May-June of 2007).

- Served as the Co-chair of the organization committee for the 2nd International Space Weather Conference, 17-21 October 2009, Nanjing, China, and delivered the conference closing speech.

- Team member of NASA Magnetospheric Constellation Science and Technology Definition Team, 2003-2004. One of the Team's responsibilities is to determine a set of compelling science objectives and an orbital strategy for the magnetospheric constellation mission, which will consist of 30 to 80 Nano-satellites to investigate various aspects of magnetospheric dynamics.

- Served on NASA/Geospace Proposal Review Panel, 2010, 2011, 2013, 2016, 2017, 2018, 2020, 2022

- Served on NSF/GEM Proposal Review Panel, 2011, 2013.

- Served as a co-convenor for CLUSTER-THEMIS Science Workshop held at LASP, during 1-5 October 2012.

- Served on Program Committee for THEMIS Science Workshop held at LASP, 23-25 March 2009.

- Co-convended the Inner Magnetosphere Session in Joint CLUSTER/THEMIS workshop, at University of New Hampshire, Sept 22-26, 2008.
- Served as a co-convener for a special session entitled: Inner Magnetospheric Dynamics, 2013 Asian Oceanic Geophysical Society Assembly.
- Lead-convener for a special session entitled: Storm-dependent Inner Magnetospheric Dynamics, in 2008 Asian Oceanic Geophysical Society Assembly.
- Served in review panel for NSF National Space Weather Program in 2007.
- Co-convended a special session: Acceleration of Radiation Belt Electrons: Inward Radial Transport vs. in situ Energization, for Fall American Geophysical Union (AGU) meeting, 5-10 December 2005.
- Co-convended a special session: Responses of Earth's space environment to Solar Events, in Global Chinese Aerospace Weather Science Meeting, Macau, 21-25 November 2005.
- Co-convended a special session: Magnetospheric Response to Extreme Solar Events, in AOGS (Asia Oceania Geosciences Society) annual meeting, Singapore, 20-24 June 2005.
- Served on NASA/SEC/Solar Terrestrial Probe/Magnetospheric Constellation Science and Technology Study and Definition Team, 1999-2004.
- Served as the study scientist (with John Wygant) in 2004 for NASA/SEC/Road Map/Inner Magnetospheric Constellation Mission. In collaboration with NASA engineers, we investigated a range of possible mission configurations to satisfy cost cap (\$300M).
- Served on student-paper evaluation committee of AGU (2003, 2004, 2008, 2010).

Reviewer for:

NASA H-FOS proposals
 NASA H-FORT proposals
 NASA H-TIDeS/LCAS proposals
 NASA Sun-Earth Connection/Guest Investigator/Living With a Star proposals
 NASA/SR&T proposals
 NSF Career proposals
 NSF GEM proposals
 NSF Base Program and Geophysical Environment Modeling proposals
 National Space Weather Program
 Journal of Geophysical Research – Space Physics
 Journal of Geophysical Research – Atmospheric Physics
 Journal of Atmospheric and Solar-Terrestrial Physics
 Geophysical Research Letters
 Annales Geophysicae
 Earth, Planets and Space
 Science of China
 Advanced Geophysics
 Advanced Plasma Physics

One chapter in book: Jupiter - The Planet, Satellites and Magnetosphere.

Reviewed and proof-read two chapters of Space Weather classnotes of Prof. Knipp of Air Force Academy in 2006.

Service to the University

- Served on the Campus Transportation Committee, which met 5 times and completed its final report to the Provost, 2010.
- Participated in a meeting on 1/27/06 about Provost initiative in international education, focusing on enhancing CU's visibility in China and recruiting good graduate students from China.

Service to the College and Graduate School

- Served on the Blue Ribbon Committee on Department-Institute Relations, 2012.
- Served in Undergraduate Education Council of College of Engineering and Applied Sciences, 2007-2008.
- Participated in a meeting on 9/7/06 hosted by Graduate School Dean (Susan Avery) on China Initiative, enhance collaboration between CU graduate programs and several Chinese Universities.

Service to the Department

- Served on DEI committee of the Aero Department, started in the Fall of 2024, meeting every other week (Chaired by Torin Clark), 2024 -
- Serving on the promotion committee for Prof. Zoltan Stenovsky of Department of Aerospace Engineering Sciences, 2022-2024.
- Serving on the post-tenure review committee for Prof. Zoltan Stenovsky of Department of Aerospace Engineering Sciences, 2021.
- Serving on the post-tenure review committee for Prof. Denise Akos Department of Aerospace Engineering Sciences, 2021.
- Served on the re-appointment committee for Instructor John Mah of Department of Aerospace Engineering Sciences, 2020.
- Served on the post-tenure review committee for Prof. David Klaus of Department of Aerospace Engineering Sciences, 2020.
- Served on the post-tenure review committee for Prof. Penny Axelrad of Department of Aerospace Engineering Sciences, 2020.
- Served as a co-mentor for a newly hired instructor, Dr. Nick Rainville, of Department of Aerospace Engineering Sciences, 2019-2020.
- Served on the post tenure review committee for Prof. Scott Palo (2018).
- Served on the post tenure review committee for Prof. Hanspeter Schaub (2018).
- Served on the evaluation committee for the Prof. Bob Marshal's re-appointment (2018).
- Served on on the evaluation committee for the re-appointment of Dr. Jelliffe Jackson of Aero Dept (2015-2016).
- Served as the Chair of PUEC for the promotion of Prof. HP Schaub to the rank of full professor.

- Served on Undergraduate Student Committee, 2012-2013
- Served on Graduate Student Committee, 2008-2012
- Served on the post-tenure review committee for Prof. W. Emery, 2012.
- Served on AERO Graduate Curriculum Committee, 2002-2008.
- Served as AERO K. D. Wood Colloquium Chair in 2009, responsible for inviting appropriate speakers (Prof. Jakosky of LASP and Prof. Harlan Spence of UNH) for speaking at K. D. Wood Colloquium.
- Served on Undergraduate Teaching Curriculum Committee of Dept. of Aerospace Engineering Sciences, 2006-2010.
- Served on the search committee of Senior Instructor of Dept. of Aerospace Engineering Sciences, 2007-2008.
- Served on AERO graduate student recruit and curricular committee, 2007-2008.
- Participated in two meetings in 2006 and 2007 between LASP and AERO about the Initiative for Hands-On Education and Research (proposed by AERO, led by Lee Peterson). The purpose of the meetings was to make best use of LASP facilities and engineering experience to enhance the training for space for the graduate students. Other participants: Dan Baker, Lee Peterson, Mike McGrath, Scott Palo.
- Served as the formal AERO department representative to the planetary graduate student admissions committee, 2004-2006.

Service to LASP

- Served on the search committee for LASP Deputy Director of Finance and Operation. Reading through files of the short list (5) and attending numerous meeting among the search committee, including interviewing the candidates. One of the committee recommended top candidates (Stephen Ettinger) was offered the position and came onboard.
- Served on LASP Space Physics RA Evaluation Committee, reading through the documents (self-evaluations and supervisors' evaluations), writing up 4 draft reports, and attending three meetings (about half a day long each) among committee members, to discuss all space physics research scientists's merits, deciding scores for each category (research, teaching, and service) after discussions and normalizations.
- Serving as J. Gosling Fellowship Award Chair of CU Boulder/LASP (2021-). The award, which was started by Jack Gosling who was a pioneer in the field of the solar wind evolution and interaction with the Earth's magnetosphere, is to give outstanding graduate students who engage in research in the aforementioned field
- Served on the retention committee for Dr. Hong Zhao (2020)
- Served on the promotion committee for Dr. Hong Zhao to RS-II (2018-2019)
- Served on the Promotion committee for Dr. Xiaohua Fang to RS-III (2018-2019).
- Served on the search/evaluation committee for hiring Dr. Steve Schwartz as a RS-III in 2017 (Dr. Schwartz joined LASP in early Jan of 2018).

- Served on the search committee for hiring a business analyst/grant manager in early 2017. Amy Jarboe was hired and started to work at LASP in middle of 2017.
- Served on the search/evaluation committee for hiring Dr. Phil Chamberlain as a RS-III in 2017. Dr. Chamberlain will join LASP in late 2018.
- Served on the merit evaluation committee of LASP tenured and tenure-track faculty members, 2013-2015.
- Served on on the evaluation committee for the promotion of Dr. Allison Jayne of LASP to RS-II (2015)
- Served on the search committee for faculty positions (CCLDAS) at LASP jointed with AERO, APS, and Physics, 2009-2010. The search was successful, both offers were accepted and the candidates came on board in 2011.
- Served on Evaluation Committee of LASP for Dr. Wenlong Liu's promotion from Scientist-I to Scientist-II, 2010.
- Served on Evaluation Committee of LASP for Dr. Peter Delamere's promotion from Scientist-II to Scientist-III, 2009.
- Served as the group leader for space physics for the Research Associate (RA) evaluations of LASP in 2007-2008, going through every RA's file and talking in person to every RA in space physics discipline (total 12) and attended meetings with other group leaders and LASP management to decide their merit raise.
- Served as a red-team reviewer on proposal HPAC (Heliophysical Pathways to Atmospheric Coupling), 2007-2008.
- Organize a LASP seminar given by Dr. Paul Graf on Recurring Surprises in PI-led Space Missions, June 1, 2007.
- Served as Evaluation Committee Chair for Dr. Shri Kanekal's promotion from Scientist-II to Scientist-III, 2007-2008.
- Served as Evaluation Committee Chair for Dr. Scot Elkington's promotion from Scientist-II to Scientist-III, 2007-2008.
- Served in Evaluation Committee for Dr. Michael Gehmeyr for transfer from the PRA career track to the Research Scientist career track, 2007.
- Served on LASP Executive Committee from 2002-2007.
- Served on promotion committee for T. E. Sarris of LASP to be promoted from Scientist-I to Scientist-II in 2006.
- Served on LASP Executive Committee, 2003-2007.
- Served on promotion committee for two young scientists of LASP to be promoted from Scientist-I to Scientist-II in 2004-2005.
- Organize a series of AERO/LASP technology seminar in 2002. Arranged AERO faculty members: Steve Nerem, Lee Peterson, Penny Axelrad, and Dale Lawrence to give technology seminars to LASP engineers and scientists, also arranged Mike McGrath, director of LASP engineer division, to give a talk at AERO describing 'Instrument and Spacecraft Engineering at LASP' to ASE faculty

and students.

- Served on LASP Education and Public Out Reach Committee, 2002-2010.
- Served on LASP graduate student curriculum committee, 2002.
- Served on AERO/LASP Cooperation Committee, 2002-2005.
- Served on LASP faculty search committee for the National Science Foundation funded solar and space faculty position in 2005.
- Served as the Chair of promotion committee for a young scientist of LASP to be promoted from Scientist I to Scientist II in 2004.

Outreach Activities:

- Consulted with NASA Science Editorial Team for publishing a technical news article about our REPTile-2 development and its achievements, entitled: 'Innovative Instrument Reveals Hidden Features Deep Inside the Van Allen Radiation Belts'

<https://science.nasa.gov/science-research/science-enabling-technology/innovative-instrument-reveals-hidden-features-deep-inside-the-van-allen-radiation-belts/>

- Consulted with NASA News Release team to prepare a lengthy article about our CIRBE CubeSat's discovery entitled: NASA CubeSat Discovers New Radiation Belts Following the 2024 May Solar Storm".

The article is to be coming out soon (2025)

- Consulted with a science writer (R. Owen) to publish a commentary article on AGU Eos about the success of our CubeSat CIRBE with the following title: Tiny satellites can provide significant information about space, Published: 10 May 2024. Eos, 105 <https://doi.org/10.1029/2024EO240211>

- Consulted with NASA for the following brief press release about our CubeSat CIRBE (on 7/31/2024):

on X (<https://x.com/NASASun/status/1818678612762988570>)

and on Facebook (<https://www.facebook.com/share/NHcBahMSVTVhQnpb/>).

- Mentored and connected a High School student (Fairview), who was interested in doing a more than 1-yr inter research, to my former graduate student (a tenure-track professor at Auburn University and had a proper project) who has been working with this high school student since our initial two meetings (in summer of 2021).

- Answered phone calls and emails to news median reporters in December of 2017 regarding the publication of our *Nature* paper.

- Gave a LASP Public Lecture about CubeSat: Our First Student CubeSat Mission: From Concept to Reality and Impact, Boulder public on 1/22/14.

- Gave a LASP Public Lecture about NASA's THEMIS mission to Boulder public on 4/7/09.
- Gave a general non-technical talk about NASA's THEMIS mission to all LASP employees on 3/2/07.

- In late January of 2007 (before THEMIS' launch), responded to e-mail inquiries and talked on the phone to a freelance journalist, Margaret Putney, for Geotimes doing a story on the THEMIS

mission to look at and study the northern lights and particularly discussed the following questions: So what do we know about the northern lights? What don't we know? So are we trying to answer all those questions about what we don't know? Do the lights really disrupt cell phones or is that a myth? Where will this research lead us? What do you personally hope to learn from this mission?

- Gave a presentation about LASP sciences to a 12-person delegation from the Malaysian Space Agency on 15 Feb 2006.

- As a scientist guest speaker at Monarch K-8 on 15 September 2005, I discussed with 6th grade students when/how I was intrigued to choose science as my career, what education is needed to become a scientist, what I do at work, and beginning and high end salaries for scientists in general.

- Wrote a feature article published in EOS newspaper: The Predictability of the Magnetosphere and Space Weather, a feature article in EOS, AGU, Step. 16, 2003. Such a feature article brings more attention to the relevance of Sun-Earth Connection research to other disciplines.

- Gave a science talk about the solar system to a 3rd grade class in Monarch Public School, Louisville, Colorado, 2003.

- Discussed solar activities and their consequences on Earth's space environment with Colorado 9 news reporter, Amanda Martin, before she went on TV reporting the Oct-Nov, 2003 solar flares and magnetospheric storm events.

- Exchanged e-mail discussions with a Science News reporter, Ron, about solar activities and their consequences on Earth's space environment before they published an article about the Oct-Nov. 2003 solar flares and magnetospheric storms.