

Curriculum Vitae

Dr. Linghua WANG

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EDUCATION:

- 1999.07 Peking University, B.S. in space physics
- 2002.07 Peking University, M.S. in space physics
- 2009.12 University of California, Berkeley, Ph.D. in physics

ACADEMIC APPOINTMENTS:

- 2009.12 – 2011.11 Postdoc, Space Sciences Laboratory, University of California, Berkeley
- 2011.12 – 2012.05 Assistant Research Physicist, Space Sciences Laboratory, University of California, Berkeley
- 2012.05 – 2018.04 Assistant professor, ISPAT, Peking University
- 2018.05 – 2023.01 Associate professor, ISPAT, Peking University
- 2023.02 – present Professor, ISPAT, Peking University

RESEARCH INTERESTS:

I am interested in Solar and Heliospheric Physics from the experimental point of view. My research is primarily focused on four topics: 1) suprathermal particles in the solar wind, 2) acceleration and transport of solar energetic particles, 3) development of space-borne energetic particle instruments, 4) energetic neutral atoms from the Sun, heliosphere and planetary magnetosphere.

SERVICES:

- 2021- present Associate Editor, JGR-space physics
- 2017- present Secretary of AOGS ST section
- 2019- present Editorial board for Spacecraft Environment Engineering and Reviews of Geophysics and Planetary Physics
- 2021- present Guest Editor for Frontiers in Astronomy and Space Sciences
- Editor of the AIP Proceedings of the 14th International Solar Wind Conference
- SOC member of the 14th, 15th and 16th International Solar Wind Conferences
- Primary Convener of more than 20 sessions in AGU, AOGS, EGU, etc.

AWARDS AND HONORS:

- 2015 China Young Female Scientist Award
- 2017 Young Research Award, the Association of Asia Pacific Physical Societies, Division of Plasma
- 2022 National Distinguished Young Scholar

INSTRUMENTATION ACTIVITIES:

- PI for the development of Interplanetary Ultralow-noise 3-Dimensional Energetic Particle Instrument, funded by NSFC
- Co-I for the Energetic Particle Detector (EPD) onboard Solar Orbiter
- Co-I for the Mercury Plasma Particle Experiment (MPPE) onboard BepiColombo/MMO
- Co-I for the Imaging Energetic Electron Spectrometer (IES) onboard the Chinese navigation satellites, and onboard the coming FY-3 and -4 and CSES-02 satellites
- Co-PI for the Energetic Neutral Atom Imaging Instrument onboard the coming Chinese satellite.
- Participate in calibrating/explaining the measurements from WIND/3DP and STEREO/STE.

SELECTED PUBLICATIONS

Linghua Wang, Interplanetary energetic electrons observed in Earth's polar cusp/cap/lobes, *Reviews of Modern Plasma Physics* 6 (1), 1-25, 2022

Wang Linghua, Qiugang Zong, Quanqi Shi, Robert F. Wimmer-Schweingruber, and Stuart D. Bale, Solar Energetic Electrons Entering the Earth's Cusp/Lobe, *The Astrophysical Journal*, 910, 12, 2021.

WANG Linghua, ZONG Qiugang, REN Jie. Detection of Energetic Particles in the Outer Heliosphere and its Boundaries[J]. *Journal of Deep Space Exploration*, 7(6):567-573, 2020, doi: 10.15982/j.issn.2096-9287.2020.20200061

Wang, L., Q.-G. Zong, Q. Shi, Y. Wang, C. Tu, J. He, H. Tian, Wimmer-Schweingruber, Robert, and H. Zou, Discrete energetic (~50-200 keV) electron events in the high-altitude cusp/polar cap/lobe, *Sci. China Tech. Sci.*, doi:10.1007/Ss11431-017-9119-x, 2017.

L Wang, S Krucker, GM Mason, RP Lin, G Li, The injection of ten electron/3He-rich SEP events, *Astronomy & Astrophysics* 585, A119, 2016.

Wang, Linghua; Yang, Liu; He, Jiansen; Tu, Chuanyi; Pei, Zhongtian; Wimmer-Schweingruber, Robert F; Bale, Stuart D, Solar Wind ~20–200 keV Superhalo Electrons at Quiet Times, *The Astrophysical Journal Letters*, 803(1) L2, 2015.

Wang, Linghua; Li, Gang; Shih, Albert Y; Lin, Robert P; Wimmer-Schweingruber, Robert F, Simulation of Energetic Neutral Atoms from Solar Energetic Particles, *The Astrophysical Journal Letters*, 793(2), L37, 2014.

Wang, Linghua; Lin, RP; Krucker, Säm; Mason, Glenn M, A statistical study of solar electron events over one solar cycle, *The Astrophysical Journal*, 759(1), 69, 2012.

Wang, Linghua; Lin, Robert P; Salem, Chadi; Pulupa, Marc; Larson, Davin E; Yoon, Peter H; Luhmann, Janet G, Quiet-time Interplanetary~ 2-20 keV Superhalo Electrons at Solar Minimum, *The Astrophysical Journal Letters*, 753(1), L23, 2012.

Wang, L; Lin, RP; Krucker, Säm, Pitch-angle Distributions and Temporal Variations of 0.3-300 keV Solar Impulsive Electron Events, *The Astrophysical Journal*, 727(2), 121, 2011.

Wang, Linghua; Lin, RP; Parks, GK; Brandt, PC; Roelof, EC; Sample, JG; Eastwood, JP; Larson, DE; Curtis, DW; Luhmann, JG, Energetic, ~5–90 keV neutral atom imaging of a weak substorm with STEREO/STE, *Geophysical Research Letters*, 37, 8, 2010.

Wang, Linghua; Lin, Robert P; Larson, Davin E; Luhmann, Janet G, Domination of heliosheath pressure by shock-accelerated pickup ions from observations of neutral atoms, *Nature*, 454(7200), 81-83, 2008.

Wang, Linghua; Lin, Robert P; Krucker, Sam; Gosling, John T, Evidence for double injections in scatter-free solar impulsive electron events, *Geophysical research letters*, 33(3), 2006.