

Academic Staff Resume

Name: Zou, Zhengyang

Title: Asistant Professor

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Academic Qualification:

Ph.D. in Sapce Physics, Wuhan University, 2012-2017

Bachelor in Electronic Information, Wuhan Textile University, 2008-2012

Teaching Area

Space Plasma Physics

Magnetosphere Physics

Research Area

Solar wind-Magenetosphere coupling

Dynamics of Earth's radiation belt electrons

Working Experience

2021.01-present, Asistant Professor, Macau University of Science and Technology

2018.7-2020.12, Postdoctor, Harbin University of Technology

Research Projects

Professional Certification and Awards

Professional Society Membership

Academic Publication

Journal Articles:

1. Zhengyang Zou, Yuri Shprits, Binbin Ni, Nikita Aseev, Fengsi Wei (2019), An Artificial Neural Network Model of Electron Fluxes in The Earth's Central Plasma Sheet: A THEMIS Survey. *ApSS*. doi: 10.1007/s10509-020-03819-0.
2. Zhengyang Zou, Pingbing Zuo, Binbin Ni, Zhonglei Gao, Geng Wang, Zhengyu Zhao, Xueshang Feng, Fengsi Wei (2020), Two-step Dropouts of Radiation Belt Electron Phase Space Density Induced by a Magnetic Cloud Event. *Astrophys. J. Lett.* doi: 10.3847/2041-8213/ab9179.
3. Zhengyang Zou, Pingbing Zuo, Binbin Ni, Fengsi Wei, Xing Cao, Song Fu, Sudong Gu, Zhengyu Zhao (2019), Wave Normal Angle Distribution of Fast Magnetosonic Waves: A Survey of Van Allen Probes EMFISIS Observations. *J. Geophys. Res: Space Phys.* doi:10.1029/2019JA026556.
4. Zhonglei Gao, Zhengyang Zou, Pingbing Zuo, Yi Wang, Zhaoguo He, and Fengsi Wei (2019), Low-frequency hiss-like whistler-mode waves generated by nonlinear three-wave interactions outside the plasmasphere *Plasma of Phys.* doi: 10.1063/1.5115542.
5. Binbin Ni, Zhengyang Zou, Song Fu, Xing Cao, Xudong Gu, and Zheng Xiang (2018), Resonant Scattering of Radiation Belt Electrons by Off-Equatorial Magnetosonic Waves, *Geophys. Res. Lett.*, 43, doi: 10.1002/2017GL075788.
6. Wenxun Zhang, Song Fu, Xudong Gu, Binbin Ni, Zheng Xiang, Danny Summers, Zhengyang Zou, Xing Cao, Yuequn Lou, and Man Hua (2018), Electron scattering by plasmaspheric hiss in a nightside plume, *Geophys. Res. Lett.*, doi: 10.1002/2018GL077212.
7. Yuequn Lou, Xudong Gu, Danny Summers, Binbin Ni, Kaijun Liu, Song Fu, Zheng Xiang, Zhengyang Zou, Xing Cao, Wenxun Zhang, He Huang, and Ying He (2018), Statistical distributions of dayside ECH waves observations by MMS, *Geophys. Res. Lett.*, doi: 10.1002/2018GL0801252.
8. Yang Zhang, Binbin Ni, Zheng Xiang, Xianguo Zhang, Xiaoxin Zhang, Xudong Gu, Song Fu, Xing Cao, and Zhengyang Zou (2018), Inter-satellite calibration of Fengyun 3 medium energy electron fluxes with POES electron measurements, *Adv Space Res.*, doi: 10.1016/j.asr.2018.02.017.
9. Xing Cao, Binbin Ni, Danny Summers, Zhengyang Zou, Song Fu, and Wenxun Zhang (2017), Bounce resonance scattering of radiation belt electrons by low-frequency hiss: comparison with

cyclotron and landau resonances, *Geophys. Res. Lett.*, doi: 10.1002/2017GL075104.

10.Xudong Gu, Qian Yin, Binbin Ni, Zheng Xiang, Xing Cao, Zhengyang Zou, Chen Zhou, Song Fu, Run Shi, Zhengyu Zhao, Jiaqiang Tan, Hao Wang, Chengyao Zheng, and Fengming He (2017), A statistical analysis of the global distribution of inner magnetospheric lower-band chorus waves based on Van Allen Probes EMFISIS observations.*Chinese Journal Of Geophysics*,60(4), doi: 10.6038/cjg20170401.

11.Xudong Gu, Qian Yin, Ruoxian Zhou, Juan Yi, Zheng Xiang, Xing Cao, Zhengyang Zou, Song Fu, Chen Zhou, Run Shi, Zhengyu Zhao, Fengming He, Jiaqiang Tan, Chengyao Zheng and Hao Wang (2017), A statistical analysis of the global distribution of inner magnetospheric upper-band chorus waves based on Van Allen Probes EMFISIS observations.*Chinese Journal Of Geophysics*,60(4), doi: 10.6038/cjg20170402.

12.Xiang, Jiaqiang Tan, Binbin ni, Xudong gu, Xing Cao, Zhengyang Zou, Chen Zhou, Song Fu, Run Shi, Zhengyu Zhao, Fengming He, Chengyao Zheng, Qian Yin, Hao Wang (2017), A statistical analysis of the global distribution of plasmaspheric hiss based on Van Allen Probes wave observations, *Acta Physica Sinica*, doi: 10.7498/aps.66.039401.

13.Binbin Ni, Zhengyang Zou, Xinlin Li, Jacob Bortnik, Lun Xie, and Xudong Gu (2016), Occurrence characteristics of outer zone relativistic electron butterfly distribution: A survey of Van Allen Probes REPT measurements, *Geophys. Res. Lett.*, 43, doi:10.1002/2016GL069350.

14.Yang Zhang, Run Shi, Binbin Ni, Xudong Gu, Xianguo Zhang, Pingbing Zuo, Song Fu, Zheng Xiang, Qi Wang, Xing Cao, and Zhengyang Zou (2016), Inferring electromagnetic ion cyclotron wave intensity from low altitude POES proton flux measurements: A detailed case study with conjugate Van Allen Probes observations, *Adv Space Res.*, doi: 10.1016/j.asr.2016.12.035.

15.Zheng Xiang, Binbin Ni, Chen Zhou, Zhengyang Zou, Xudong Gu, Zhengyu Zhao, Xianguo Zhang, Xiaoxin Zhang, Shenyi Zhang, Xinlin Li, Pingbing Zuo, Harlan Spence, and Geoffrey Reeves (2016), Multi-satellite simultaneous observations of magnetopause and atmospheric losses of radiation belt electrons during an intense solar wind dynamic pressure pulse, *Ann. Geophys.*, 34, 493-509, doi: 10.5194/angeo-34-493-2016.

16.Binbin Ni, Zhengyang Zou, Xudong Gu, Chen Zhou, Richard M. Thorne, Jacob Bortnik, Run Shi, Zhengyu Zhao, Daniel N. Baker, Shrikhanth G. Kanekal, Harlan E. Spence, Geoffrey D. Reeves, Xinlin 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 Phys*, doi: 10.1002/2015JA021065.

17.Binbin Ni, Xing Cao, Zhengyang Zou, Chen Zhou, Xudong Gu, Jacob Bortnik, Jichun Zhang, Song Fu, Zhengyu Zhao, Run Shi, and Lun Xie (2015), *J. Geophys. Res: Space Phys*, doi: 10.1002/2015JA021466.

Books & Book Chapters:

Conference Papers: