



# Research Field: SPACE PHYSICS

## Focused Field: LUNAR AND PLANETARY SPACE PHYSICS

### SHORT BIO

Following a B.Sc. degree in Space Physics at University of Science and Technology of China in July 2006, I was offered a Ph.D degree in June, 2011, supervised by Prof. Fengsi Wei (魏奉思), at National Space Science Centre, Chinese Academy of Sciences.

In 2011, I joined the Institute of Space Science and Technology at Nanchang University. In September 2013, I joined a lunar space environment project as a Postdoc led by Prof. Hon-Cheng Wong, at Space Science Institute in Macau University of Science and Technology.

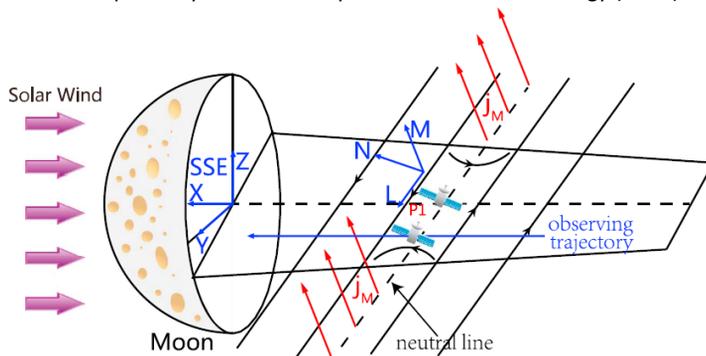
In 2015, I was offered a position as an assistant professor at the State Key Laboratory of Lunar and Planetary Sciences in University of Science and Technology, affiliated with the Chinese National Space Administration. In 2021, I was promoted to Associate Professor and became the leader of the Planetary Space Science Group. My research interests include the solar wind and its interaction with the Moon, Venus and Mars. I supervised 5 Ph.D and 6 Master students, published more than 50 papers and led 5 research projects. I am also teaching a number of both undergraduate and post-graduate courses.

Assoc. Prof.

Xiaojun Xu  
徐晓军



PhD: Space Physics– National Space Science Center, CAS  
Bachelor: Space Physics– University of Science and Technology (USTC)



The potential magnetic field in the near lunar wake (Xu et al. 2015)

### KEY PUBLICATIONS (first author)

- Xiaojun Xu, Jiaying Xu, Qi Xu, Qing Chang, and Jing Wang, Rapid Refilling of the Lunar Wake under Transonic Plasma Flow ARTEMIS Observations, *Astrophys. J.*, 908, 227, 2021
- Jiaying Xu, Xiaojun Xu (Corr\*), et al. The Nonrelaxation of Magnetic Field Lines in Solar Wind Magnetic Reconnection Exhausts, *Astrophys. J.*, 921:137, 2021.
- Qi Xu, Xiaojun Xu (Corr\*), et al. The Venus Express observation of Venus' induced magnetosphere boundary at solar maximum, *Astronomy&Astrophysics*, 652, A113, 2021.
- J. Wang, J.Yu, Xiaojun Xu (Corr\*) et al., MAVEN Observations of Magnetic Reconnection at Martian Induced Magnetopause, *Geophys. Res. Lett.*, 48, e2021GL095426, 2021
- Qing Chang, Xiaojun Xu (Corr\*), et al., The Demagnetization of the Venusian Ionosphere Under Nearly Flow-aligned Interplanetary Magnetic Fields, *Astrophys. J.*, 900, 63, 2020.

### PROFESSIONAL EXPERIENCE

- 2021 – Ongoing – Macau University of Science and Technology, Macao (China) – Assoc. Prof.
- 2015 – 2021 – Macau University of Science and Technology, Macao (China) – Asst. Prof.
- 2013 – 2015 – Macau University of Science and Technology, Macao (China) – Postdoc
- 2011 – 2013 – Nanchang University, Nanchang, Jiangxi (China) – Specially-appointed Assoc. Prof.

### GRANTS (Principal Investigator)

- <Lunar and Planetary Space environment> 2022.01-2024.12  
(NSFC: National Science Fund for Excellent Young Scholars)
- <Study of the Moon's energetic particle environment and forecast of the Earth's bow shock energetic particles at Moon> 2019.07-2022.07
- <Comparative study of Venusian and Martian induced magnetospheres> 2016.07-2019.07
- <The lunar wake interactions with small plasma structures in the solar wind> 2016.01-2019.12
- <The dynamic process of magnetic reconnection in the interplanetary solar wind> 2013.01-2015.12

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