



# Research Field: Space Physics

Focused Field: magnetic reconnection, turbulence, ICMEs

## SHORT BIO

Following a Bachelor's degree in Applied Physics at University of Science and Technology of China (USTC, 2011), I got a PhD degree majored in space physics at National Space Science Center, CAS, under the supervision of Prof Fengsi Wei.

I accepted a post-doctoral position in 2020 at State Key Laboratory of Lunar and Planetary Sciences, Macau University of Science and Technology. Currently I am an assistant professor at MUST. My research interests are interplanetary coronal mass ejections (ICMEs) and energy dissipation processes in the solar wind such as magnetic reconnection, turbulence cascade, and slow mode shocks in the solar wind.

Assistant Professor

Zilu Zhou



PhD: Space Physics

– National Space Science Center, CAS

Degree: Applied Physics

– University of Science and Technology of China

## KEY PUBLICATIONS (selected)

**Zhou, Z.**, Xu, X., Zuo, P., Wang, Y., Wang, L., Ye, Y., Wang, M., Chang, Q., Wang, X. and Luo, L., 2022. PSP observations of a slow shock pair bounding a large-scale plasmoid/macro magnetic hole. *Geophysical Research Letters*, 49, e2021GL097564.

**Zhou, Z.**, Xu, X., Zuo, P., Wang, Y., Xu, Q., Ye, Y., Wang, J., Wang, M., Chang, Q., Wang, X. and Luo, L., 2022. Evidence for Plasma Heating at Thin Current Sheets in the Solar Wind. *The Astrophysical Journal Letters*, 924(2), p.L22.

**Zhou, Z.**, Zuo, P., Wei, F., Feng, X., Wang, Y., Wang, L., Jiang, C., Song, X. and Xu, X., 2019. Intermittent Heating in the Magnetic Cloud Sheath Regions. *The Astrophysical Journal Letters*, 885(1), p.L13.

**Zhou, Z.**, Zuo, P., Feng, X., Wang, Y., Jiang, C. and Song, X., 2019. Intermittencies and Local Heating in Magnetic Cloud Boundary Layers. *Solar Physics*, 294(11), p.149.

**Zhou, Z.**, Wei, F., Feng, X., Wang, Y., Zuo, P. and Xu, X., 2018. Observation of interplanetary slow shock pair associated with reconnection exhaust in magnetic cloud boundary layer. *The Astrophysical Journal*, 863(1), p.84.

## PROFESSIONAL EXPERIENCE

**Jan. 2023 – present** – *Macau University of Science and Technology, Macao (China)* – Assistant professor

**June 2020 – June 2022** – *Macau University of Science and Technology, Macao (China)* – Post Doctor

**July 2019 – May 2020** – *Harbin Institute of Technology, Shenzhen, Guangdong(China)* – Research Assistant

## GRANTS

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