(+86) 178-7000-9780 wukoutian@mail.ustc.edu.cn

Koutian Wu Junior in Space Physics

home.ustc.edu.cn/ wukoutian frank-koutianwu.github.io

EDUCATION BACKGOUND

Zhao Jiuzhang Talent Program in Earth and Space Sciences, USTC (B.S.)

Sep 2020 – Expected in Jul 2024

Advisor: Prof. Xianghui Xue

- Overall GPA: 3.46/4.30 (85.28/100) | Ranking: 7/16 in Space Science and Technology
- Selected Scholarship:

* Zhao Jiuzhang Scholarship (Top 3rd)

2022

* Outstanding Student Scholarship

2022

* Scholarship for Talent Program in Basic Disciplines

2020 - 2022

RESEARCH EXPERIENCE

Research Interests: Physics of middle and upper atmosphere, Space Weather, Solar Physics

Seminar of National Field Scientific Observation Station of Electromagnetic Wave Environment Aug 2022

Advised by Prof. Xianguhi Xue (USTC)

Kunming, Yunnan

- I was the only undergraduate student invited to the seminar.
- Visited meteor radar, incoherent scattering radar, MST radar, MF radar and so on.
- The principle of middle and upper atmosphere remote sensing is discussed.

Study the evolution of CME using the in situ observations near the Earth and Mars Advised by Prof. Chenglong Shen (USTC), in collaboration with Jinshu Cai

Dec 2022 - Now

Hefei, Anhui

• This project uses the observation of CME internal structure at different distances presented by the planetary exploration program to study the evolution of coronal mass ejection internal structure characteristics.

Meteor shower velocity estimates from the Mengcheng meteor radar Advised by Prof. Xianguhi Xue (USTC)

Apr 2022 - Now

Hefei, Anhui

- A new method of atmospheric density estimation based on meteor deceleration process is presented.
- Discussed the spatial and temporal distribution of meteors using most updated Mengcheng meteor radar data in 2022.
- Assessed: Part of results received A in Both General Astronomy Course and Planetary Space Course in USTC, Jul 2022.

Construction of dynamic heat dissipation structure – Taking 3D chip as an example

Advised by Prof. Quanshui Zheng (Tsinghua University & X-institute), Prof. Jun Yang and A.P. Qiuquan Guo (both from UESTC & X-institute), in collaboration with Yihao Yang and Yuchen Li

Shenzhen, Guangdong

- We designed a simple 4*4 dynamic motion structure model, whose heat dissipation ability is obviously better than that of the static structure. This model expands the application scenario of dynamic heat dissipation structure.
- Assessed: We received Best imagination Award. I and Yihao Yang was elected as X-Institute Student Fellow.

SELECTED HONORS AND AWARDS

One-Star Volunteer of USTC	2022
Competition of Essay Writing of Electromagnetics of USTC, 1rd Prize	2022
Competition of Essay Writing of Optics of USTC, 2rd Prize	2022
Student Social Practice and Science Contest on Energy Saving & Emission Reduction of USTC, 3rd Prize	2021
X-Institute Student Fellow	2021

SKILLS AND LANGUAGES

Programming	C/C++, Python, MATLAB, LATEX, Markdown, HTML, Origin
English	CET-4: 528 TOEFL iBT: ? (R?, L?, S?, W?)

LEADERSHIP EXPERIENCE

Interest Group of Planetary Science, Deputy group leader	2022 - Now
USTC Online Academy of Training Plan for Top Students in Basic Disciplines, Student Administrator	2021 - Now
USTC Student Xing Yun Poetry Club, founding president (The youngest of all club presidents)	2020 - 2022