Hanxun Wu

✉ abwuge@163.com
🌐 www.hxwu.top
 abwuge
iD 0009-0004-6402-659X

Education

2021–2025   **Bachelor**, *Southwest Jiaotong University*, 3.46/4

Publication

[1] Jinrui Liu, Hanxun Wu, Qi Liu, Yujie Ji, Rui Xu, Feng Zhang, and Hu Liu. Study of angular resolution using imaging atmospheric cherenkov technique. *Universe*, 10(2), 2024.

Selected Research Experience

2024.12–2025.6   **Study on Nonlinear Reconstruction of Particle Velocity for AMS Time-of-Flight Detector**, *Bachelor Thesis*, Shandong Institute of Advanced Technology
A study on nonlinear velocity reconstruction for AMS TOF, correcting energy loss bias and enhancing low-energy particle measurement accuracy.
Innovation & Achievements:
- Global calibration of particle energy loss based on TOF measurements
- Achieving near-zero reconstruction error
- Reaching a twofold improvement in resolution

2023.5–2024.5   **Cosmic Ray Direction Reconstruction Based on Cherenkov Telescope**, *Student Research Training Program*, Southwest Jiaotong University
Angular resolution optimization for ultra-high-energy gamma-ray telescopes via aperture, FoV, pixel size, PSF, and timing analysis.
Innovation & Achievements:
- Parametric modeling of the Cherenkov telescope
- Identifying resolution-critical parameters for telescope design
- Quantifying the impact of each parameter on angular resolution

Selected Awards and Honors

2025   **Outstanding Graduate**, *Southwest Jiaotong University*

2024   **National Encouragement Scholarship**

2024   **Institute of High Energy Physics, Chinese Academy of Sciences Talent Scholarship**

2024   **Lanqiao Cup National Software and Information Technology Professional Talent Competition (Software Category)**, *First Prize (Provincial Competition)*

2022 & 2024   **National University Students Electrical Math Modeling Competition**
- Third Prize (2024)
- Third Prize (2022)

▬▬ Languages

Chinese	Native
English	B2

Test by Duolingo / Advancing

▬▬ Skill Matrix

■□□□□	basic knowledge	■■■□□ extensive project experience
■■□□□	intermediate knowledge with some	■■■■□ deepened expert knowledge
	project experience	■■■■■ expert / specialist

	Level	Skill	Years	Comment
Language:	■■■□□	C++	4	*Probably a 3.5 level – I use it all the time and know my way around most of it.*
	■■■□□	MATLAB & Python	4	*Used for coursework and small projects.*
	■■□□□	LaTeX	3	*Nearly half my work uses LaTeX.*
	■■□□□	Java & JavaScript	2	*Applied in personal interest projects.*
Tools:	■■■□□	ROOT	2	*Also boosts my C++ skills.*
	■■□□□	OriginLab	3	*Rarely used since switching to ROOT.*
	■□□□□	CORSIKA	2	*Learned, rarely used.*
	■□□□□	Geant4	1	*Learned, not used.*
OS:	■■■□□	Linux	6	*Ubuntu, CentOS, Arch Linux*

▬▬ Interests

Running	I like running, especially long-distance running.
Table Tennis	Almost all Chinese love table tennis?
Badminton	More intense than table tennis.
Minecraft	I love creative building, automation, and survival tech!