

HUI-YU ZHU POSTDOC.

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CURRENT POSITION	Senior Researcher in Institute for Basic Science <i>Cosmology, Gravity and Astroparticle Physics Group</i> • Address: Institute for Basic Science (IBS), 55, Expo-ro, Yuseong-gu, Daejeon, Korea.	2024.11 -
EDUCATION	Hong Kong University of Science and Technology (HKUST) <i>Ph.D. in Physics</i> • Supervisor: Prof. George Smoot and Prof. Yi Wang Southern University of Science and Technology (SUSTech) <i>B.S. in Physics</i> • Supervisor: Prof. Leonardo Modesto	2019 - 2024 2015 - 2019
AWARDS AND SCHOLARSHIP	• Postgraduate Scholarship, HKUST • The Graduation Design Excellence Award, SUSTech • National Encouragement Scholarship, China • Bronze Medal, University Physics Competition • National Encouragement Scholarship, China • Second Prize, Chinese Undergraduate Physics Tournament • Third Prize, Outstanding Student Scholarship, SUSTech • Bronze Medal, Musical Instrument Competition In Guangdong	2019 - 2024 2019 2018 2017 2017 2017 2016 2015
TEACHING EXPERIENCE	Teaching Assistant in the HKUST <i>Physics Department</i> • General Physics I with Calculus • Introduction of Stellar Astrophysics • Methods of Experimental Physics I • Methods of Experimental Physics I Teaching Assistant in the SUSTech <i>Physics Department</i> • Introduction to Quantum Field Theory • General Relativity: From Black Hole to Cosmology	2022 2022 2021 2020 2019 2018
SERVICES	Organizer for: Workshop on QNM and BH Perturbation, IBS Assistant for: International Conference on High Energy Physics, HKUST Assistant for: International Conference on Quantum Gravity, SUSTech	
OUTREACH	Founder and Vice President for: Piano Association, SUSTech Principal Cello and Pianist: SUSTech Orchestra	
SKILLS	Languages: Chinese (Native), English (Fluent), Japanese (Beginner), Italian(Beginner). Programming: Python, Mathematica.	

INVITED TALKS & SEMINARS	• Workshop on QNM and BH Perturbation , IBS, Daejeon, Korea	2025.05
	• Seminar at Niels Bohr Institute , Copenhagen , Denmark	2025.04
	• Workshop on Cosmology, Gravitation and Particle Physics , FZU, Czech	2025.04
	• Seminar at École normale supérieure de Lyon , France	2025.04
	• Seminar at HKUST , Hong Kong, China	2024.12
	• Workshop on Cosmology, Gravity, Particle Physics , CAS-IBS-IST, Japan	2024.10
	• Seminar at Yangzhou University , China	2024.04
	• Seminar at Shanghai Jiao Tong University , China	2024.03
	• Seminar at SUSTech , China	2023.10
	• Seminar at Kyoto University , Japan	2023.06
	• Seminar at RIKEN iTHEMS , Japan	2023.06
	• Seminar at Kavli IPMU , Japan	2023.06
CONTRIBUTED TALKS & POSTER	• New Horizon of Black Hole Physics , YITP, Kyoto, Japan	2025.01
	• High1 Workshop on Particle, String and Cosmology , KAIST & IBS, Korea	2025.01
	• COSMO24 , Kyoto University, Japan (Poster)	2024.10
	• Workshop on cosmology, Gravity, and Particle physics , USTC-IBS-IST, Japan	2024.09
	• New horizons for Psi school & workshop , IST, Lisbon, Portugal (Poster)	2024.07
	• YITP Long Term Workshop on Gravity and Cosmology , Kyoto, Japan	2024.01
	• International Symposium on Cosmology and Particle Astrophysics , Hong Kong	2023.11
	• Joint Annual Conference of Physical Societies , Hong Kong, China	2023.07
	• Conference on String theory, Gravity and Cosmology , APCPT (Online)	2022.06
	• Conference on Gravity and Cosmology , YITP (Online)	2022.06
SCHOOLS	• LPTHE Advanced Summer School in QFT and QG , Vietnam	2024
	• Summer School on String Theory, Field Theory and Holographic Theory , China	2021
	• Winter School on X-ray Data Analysis , Fudan University, China	2018
	• Xinjiang Astronomical Observatory Summer Camp , China	2017
ACADEMIC VISITING	• Niels Bohr Institute , 1 week (Host: Vitor Cardoso)	2025
	• Lyon ENS , 1 week (Host: Etera Livine)	2025
	• HKUST , 1 week (Host: Yi Wang)	2025
	• Yangzhou University , 1 week (Host: Yen Chin Ong)	2024
	• Shanghai Jiaotong University , 1 week (Host: Yucheng Qiu)	2024
	• Kyoto University , 2 weeks (Host: Takahiro Tanaka)	2023
	• Kavli IPMU , 1 week (Host: Misao Sasaki)	2023
	• University of Science and Technology of China , 4 months (Host: Yifu Cai)	2023

REFERENCES

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- [6] Y. C. Qiu and H. Y. Zhu, “Probing neutrino sector via a statistical approach,” *Int. J. Mod. Phys. A* **37** (2022) no.10, 2250055 doi:10.1142/S0217751X22500555 [arXiv:2110.10462 [hep-ph]].
- [7] X. Tong, Y. Wang and H. Y. Zhu, “Gravitational Collider Physics via Pulsar–Black Hole Binaries II: Fine and Hyperfine Structures Are Favored,” *Astrophys. J.* **924** (2022) no.2, 99 doi:10.3847/1538-4357/ac36db [arXiv:2106.13484 [astro-ph.HE]].
- [8] L. Modesto, H. Y. Zhu and J. Y. Zhang, “Approaching a spacetime singularity in conformal gravity,” [arXiv:1906.09043 [gr-qc]].

Note: Except [2] & [8], the author’s name is listed in the sequence of the surname’s first character, among which I am the corresponding author for [1] and [3]. In other work, I contribute equally with my collaborators.