Yuanzhu Huang

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Website: Yuenzuk

Education

Fudan University, Shanghai, China — Sept. 2021 - June 2024 (expected)
Master's degree in Theoretical Physics
Master Advisor: Yang Zhou
GPA: 3.58/4.0

Sun Yat-sen University, Guangzhou, China — Sept. 2017 - June 2021
Bachelor's degree in Physics
GPA: 3.9/4.0; Rank:10/85
Thesis Title: *On General Properties of Analogue Gravity*
Thesis Advisor: Jia-Rui Sun

Teaching Experience

Teaching assistant in Thermodynamics — Feb. 2023 - June 2023

- Lecturer: Yuanbo Zhang; Number of Students: 76
- Conducted bi-weekly tutorial sessions (also wrote lecture notes for tutorial sessions)
- Evaluated assignments, enhancing their understanding basic principles
- Received an "Outstanding" evaluation as a Teaching Assistant

Teaching assistant in Classical Mechanics — Sept. 2021 - Jan. 2022

- Lecturer: Zhifang Lin; Number of Students: 129
- Held paper presentations of students, talked with them and evaluted their presentations
- Evaluated assignments, enhancing their understanding basic principles
- Received an "Outstanding" evaluation as a Teaching Assistant

Research Experience

Study of Symmetry-Resolved Entanglement in CFT and Holography Sept. 2023 - Present

- Supervisor: Yang Zhou
- Extracted information from symmetry-resolved entanglement (Rényi) entropy at large charge limit
- Explored more entanglement quantities in symmetry resolution
- Tried to understand symmetry-resolved quantities using holography

Research Interests

Information and Entanglement Entropy
Holographic entanglement entropy; Symmetry-resolved entanglement

Critical Phenomena and Renormalization Group Flows
Percolation; Schramm–Loewner evolution; c-theorem

Other subjects where physics may get combined with mathematics amazingly...

Awards and Honors

First Prize Scholarship at Sun Yat-sen University (Top 5%) 2020

Wanglaoji Corporate Scholarship (Top 2%) 2020

Frist Prize in *The 4th South China Astronomy Contest for University Students* 2020

First Prize in the Preliminary Round of the *11th National College Student Mathematics Competition* (Non-Mathematics Major Category) 2019

Third Prize Scholarship at Sun Yat-sen University 2019

Third Prize Scholarship at Sun Yat-sen University 2018

Academic Activities

Reading Seminar Fudan University
My talks: *Symmetry-Resolved Entanglement Entropy*

Inter-university Journal Club Online
My talks: *Shannon/von Neumann Entropy and Entanglement*

Summer School ShanghaiTech University
Frontiers in Theoretical High Energy Physics

Joint Journal Club Fudan University
Talking about different topics informally

Skills

Languages Mandarin Chinese (Native), Sichuanese (Native), Cantonese (Fluent), English (Fluent; IELTS: 7.0)

Coding Python, Mathematica, HTML