

Chun Huang | Curriculum Vitae

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Date of Birth: 2000/06/19

Education

Washington University in St Louis

PhD in physics (2022 - present)

Advisor: Alex Chen, Yajie Yuan, Micheal Nowak

St. Louis, MO, USA

09/2022 - Present

Central China Normal University

B.S. Department of Physics

Minor: Physics Base Class, Physics Base Fellowship (2018 - 2021)

Wuhan, Hubei

09/2018 - 06/2020

Publications and Presentations

Leading Author Publications

1. [Chun Huang](#), “Equation of State Independent Determination on the Radius of a $1.4 M_{\odot}$ Neutron Star Using Mass-Radius Measurements” (2024) Submitted to ApJ Letters. **(Single author)**
2. [Chun Huang](#), Tuhin Malik, João Cartaxo, Shashwat Sourav, Wenli Yuan, Tianzhe Zhou, Xuezhi Liu, John Groger, Xieyuan Dong, Nicole Osborn, Nathan Whitsett, Zhiheng Wang, Constança Providência, Micaela Oertel, Alexander Y. Chen, Laura Tolos and Anna Watts, “CompactObject: An open-source Python package for full-scope neutron star equation of state inference”, arXiv: 2411.14615, (2024) Submitted to JOSS. **(First and corresponding author)**
3. Wenli Yuan, [Chun Huang](#), Chen Zhang, Enping Zhou, Renxin Xu, “Bayesian inference of strangeon matter using the new measurement of J0437-4751 and GW190814”, arXiv: 2411.14938, (2024) Submitted to PRD.
4. [Chun Huang](#), Laura Tolos,, Constança Providência and Anna Watts, “Constraining fundamental nuclear physics parameters using neutron star mass-radius measurements II: Hyperonic models” arXiv: 2410.14572, (2024) Submitted to MNRAS **(First and corresponding author)**
5. [Chun Huang](#) and Xiaoping Zheng “Bayesian Insights into post-Glitch Dynamics: Model comparison and parameter constraint from decades long observation data of the Crab pulsar” aXiv: 2409.18432, (2024) **(First author)**

6. **Chun Huang**, Geert Raaijmakers, Anna Watts, Laura Tolos,, Constança Providência,
“Constraining a relativistic mean field model using neutron star mass–radius measurements I: nucleonic models”, MNRAS, (2023) **(First and corresponding author)**
7. **Chun Huang** and Yuchen Jiang, Symmetry breaking Paradigm In Typical Laminar-Turbulence Transition System, arXiv: 2108.09486 (2020) **(First and corresponding author)**

Other Publications

1. Xiaoping Zheng, WeiHua Wang, **Chun Huang** and Jianping Yuan “The unprecedentedly persistent spin-down increase of the Crab pulsar rules out external torque variations due to starquakes”, submitted to ApJ.

Posters and Presentations

- 1.2020/06, Beijing Normal University, Xiaosong Chen’s group
- 2.2021/08 Huazhong University of Science and Technology
- 3.2021/08 Lanzhou University, 5th round workshop on theoretical astrophysics
- 4.2021/09 Peking University, 2021 PKU-DoA Undergraduate Astronomy Symposium talk
- 5.2021/12 Tsung-Dao-Lee Institute, “Lun Dao” Doctoral Student Forum, Contributed Talk
- 6.2024/03 MIT Kavli institute, Invited talk
- 7.2024/03 Harvard CfA, Seminar talk
- 8.2024/03 Tufts, Seminar talk
- 9.2024/05 Groningen group meeting talk
- 10.2024/06 Purdue Plasma physics conference, contributed poster.
- 11.2024/06 Tsinghua Astronomy, Seminar talk
- 12.2024/06 Peking University, Astrophysics Seminar
- 13.2024/11 UIUC, Nicolas Yunes, Group meeting talk

Honors and Awards

- 2022-2024 Washington University, Art-Science Fellowship
- 2021 SJTU Tsung-Dao-Lee Institute, “Lun Dao” Doctoral Student Forum, First Prize, (as the only Undergrad attendee)
- 2021 PKU-DoA Undergraduate Astronomy Symposium, Best report second prize, ranked 8/40
- Physics Base fellowship 2018,2019,2020
- 2020/05 China Undergraduate Physics Tournament: Central South regional Second Prize [as leader]
- 2020/09 China Undergraduate Physics Tournament: National Third Prize [as leader]

Collaborating/Advising students

Wenli Yuan (Peking University Postdoc),
Zhiheng Wang (WUSTL graduate student),

TianZhe Zhou (Tsinghua graduate student),
QiuLi Wang(Nanjing PMO graduate student, co-advised with Prof. Daming Wei),
John Groger(WUSTL graduate student),
Shashwat Sourav(WUSTL graduate student),
Xieyuan Dong (NanKai University, master student, co-advised with Prof JingNiu Hu),
Xuezhi Liu (Central China Normal University, master student, co-advised with Prof. Xiaoping Zheng),
Ryan O'Connor (WUSTL undergrad, co-advised with Prof. Alex Chen)

Teaching Experience

2022/2023/2024 TA in Physics 191 and 192 Lab.