Yuxuan Pang, Ph.D.

pyx_s2@pku.edu.cn



Research Interests

Slitless spectroscopy quasar survey, Optical to near-infrared spectroscopy and variability of quasars, and machine learning

Education

2019 – · · · · Ph.D., Peking University Astrophysics.

Thesis title: Quasar Surveys from Slitless Spectra of Space Telescopes

2015 – 2019 **Bachelor, Beijing Institute of Technology** Applied Physics.

Publications

First Author

- P. Yuxuan, W. Xue-Bing, F. Yuming, et al., A pilot study for the csst slitless spectroscopic quasar survey based on mock data, 2024.
- P. Yuxuan, W. Xue-Bing, F. Yuming, et al., Quasar identifications from the slitless spectra: A test from 3d-hst, 2024.

Co-authored

- H.-C. Feng, S.-S. Li, J. M. Bai, et al., Velocity-resolved Reverberation Mapping of Changing-look Active Galactic Nucleus NGC 4151 during Outburst Stage. II. Four Season Observation Results, Sep. 2024. ODOI: 10.48550/arXiv.2409.01637. arXiv: 2409.01637 [astro-ph.GA].
- Y. Fu, X.-B. Wu, Y. Li, et al., CatNorth: An Improved Gaia DR3 Quasar Candidate Catalog with Pan-STARRS1 and CatWISE, Apr. 2024. O DOI: 10.3847/1538-4365/ad2ae6. arXiv: 2310.12704 [astro-ph.GA].
- S.-S. Li, H.-C. Feng, H. T. Liu, et al., Velocity-resolved Ionization Mapping of Broad Line Region. I. Insights into Diverse Geometry and Kinematics, Sep. 2024. ODI: 10.3847/1538-4357/ad60c1. arXiv: 2407.05414 [astro-ph.GA].
- J.-J. Jin, X.-B. Wu, Y. Fu, et al., The Large Sky Area Multi-Object Fiber Spectroscopic Telescope (LAMOST)

 Quasar Survey: Quasar Properties from Data Releases 6 to 9, Mar. 2023. ODOI:

 10.3847/1538-4365/acaf89. arXiv: 2212.12876 [astro-ph.GA].
- Y. Fu, X.-B. Wu, L. Jiang, et al., Finding Quasars behind the Galactic Plane. II. Spectroscopic Identifications of 204 Quasars at $|b| < 20^{\circ}$, Aug. 2022. DOI: 10.3847/1538-4365/ac7f3e. arXiv: 2206.05704 [astro-ph.GA].

Research Skills

Proposals

CTAP2025-A0028: Optical Identifications of the Slitless Spectroscopy Selected Quasar Candidates (PI)

CTAP2024-A0073: A Quest for the Evolutionary Stage of FeLoBAL Quasars with Near-Infrared Spectroscopy (PI)

Joint application for the 2-meter telescope of the Chinese Academy of Sciences in 2024: Optical Identifications of the Quasar Candidates from WISP survey (PI)

Joint application for the 2-meter telescope of the Chinese Academy of Sciences in 2022: Quasar slitless spectra observation and reverberation mapping research (PI)

Observation experience

- 3 nights remote observation in P200
- 8 nights observation in Xinglong 2.16-meter telescope
- 9 nights observation in Lijiang 2.4-meter telescope

Talks & Posters

Oct. 2024 Selection of QSOs in Space Telescope Slitless Spectroscopy, CSST Scientific Data Systems Workshop, Yinchuan, China

Nov. 2023 Quasar Search Based on Slitless Spectra of Space Telescopes, CSST Galaxy Evolution and Cosmology Topic Exchange Meeting, Suzhou, China

Aug. 2023 Selection of QSOs in Space Telescope Slitless Spectroscopy (Poster), China Astronomical Science Annual Conference, Weihai, China

Mar. 2023 Quasar survey requirements for CSST slitless spectroscopy, CSST Annual Scientific Meeting, Beijing, China

CSST Galaxy & AGN Science Discussion

Series I: Quasar Selection Methods (Arp. 2021)

Series II: The slitless spectroscopy science with other information (Jun. 2022)

Series III: Revealing AGN torus through High-Spatial Resolution Observation (Jul. 2023)

Series IV: QSO survey: Selection, photo-z & Ordinary Variability in LSST (Nov. 2023)

Teaching Experience

Teaching Assistant, Jul. 2024 Lecturer, Lesson: Decomposition of the one-dimensional spectra of quasars and galaxies, CSST Summer School on Galaxy Sciences, Peking University

Teaching Assistant, Jul. 2022, CSST Summer School on Galaxy Sciences, Peking University

Teaching Assistant, Basic Astronomy, Peking University 2021-2022B

Miscellaneous Experience

Honors & Awards

2021, 2022 Dedicated Scholarship for Outstanding PhD Students, Peking University

2019 Outstanding Graduates, Beijing Institute of Technology

2017 Dedicated Scholarship for Outstanding Students, Beijing Institute of Technology

Honorable Mention of Mathematical Contest in Modeling

2016,2017 Second prize of China Undergraduate Physics Tournament

Badminton

2023 Badminton Peking University Cup Num.8

2022 Most valuable badminton player of KIAA

Miscellaneous Experience (continued)

2020-2021

Badminton Weekly Activities Manager of KIAA

References

Available on Request