Jia-Shu Pan

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https://panjiashu.github.io/

Education

2018 – 2023 **B.S., Nanjing University** Astronomy
GPA: 4.39/5.00 (3.42/4.00)
TOEFL: 106 (R 30 L 28 S 23 W 25)

Research Interest

My research is centered on **representation learning** of stellar light curves, the temporal brightness variation of stars, with a specific focus on **unsupervised learning** algorithms on irregular and noisy time series.

Referred Publications

Journal Articles

1. **J.-S. Pan**, Y.-S. Ting, and J. Yu, "Astroconformer: The prospects of analysing stellar light curves with transformer-based deep learning models," *Monthly Notices of the Royal Astronomical Society*, vol. 528, no. 4, pp. 5890–5903, Jan. 2024, ISSN: 0035-8711. DOI: 10.1093/mnras/stae068. eprint: https://academic.oup.com/mnras/article-pdf/528/4/5890/56707271/stae068.pdf.
2. X.-H. Liang, C.-M. Li, Q.-Z. Wu, **J.-S. Pan**, and R.-Y. Liu, "A pevatron candidate: Modeling the boomerang nebula in x-ray band," *Universe*, vol. 8, no. 10, 2022, ISSN: 2218-1997. DOI: 10.3390/universe8100547.

Conference Proceedings

1. **J.-S. Pan**, Y.-S. Ting, Y. Huang, J. Yu, and J.-F. Liu, "The scaling law in stellar light curves," in *ICML 2024 AI4Science Workshop (submitted)*, May 2024. URL: https://arxiv.org/abs/2405.17156.
2. **J.-S. Pan**, Y.-S. Ting, and J. Yu, "Astroconformer: Inferring surface gravity of stars from stellar light curves with transformer," in *ICML 2022 Machine Learning for Astrophysics Workshop*, Jun. 2022. URL: https://ml4astro.github.io/icml2022/assets/10.pdf.

Skills

Languages Mandarin Chinese (native), English
Coding Python, C, LaTeX, …

References

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