Yugo KAWAI

PhD Student in Exoplanetary Science, JSPS Research Fellow (DC2)

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Profile

PhD student specializing in exoplanet formation and evolution, with experience in observational analysis and statistical modeling.

Education

2024- Ph.D., The University of Tokyo, Tokyo, Japan

Expected Graduate School of Arts and Sciences

2027 Supervisor: Prof. Norio Narita

2022–2024 M.A. in Arts, The University of Tokyo, Tokyo, Japan

Graduate School of Arts and Sciences

Thesis: Probing the peculiar architecture of an exoplanetary system with TESS photometric light curves (Outstanding Master's Thesis Award)

2017–2022 B.A. in International Liberal Studies, Waseda University, Tokyo, Japan

B.A. in Communications and New Media, *National University of Singapore*, Singapore Double Degree Program

Fellowships

- 2025–Present JSPS Research Fellowship for Young Scientists (DC2), Japan Society for the Promotion of Science, The University of Tokyo
 - 2023–2024 **JST SPRING Fellowship**, Support for Pioneering Research Initiated by the Next Generation, The University of Tokyo
 - 2022–2023 **WINGS-ABC Fellowship**, World-leading Innovative Graduate Study Program of Advanced Basic Science, The University of Tokyo

Papers

Kawai, Y., N. Narita, A. Fukui, N. Watanabe, and S. Inaba (Feb. 2024). "The flipped orbit of KELT-19Ab inferred from the symmetric TESS transit light curves". In: Monthly Notices of the Royal Astronomical Society 528.1, pp. 270-280. DOI: 10.1093/mnras/stad3915. arXiv: 2312.11815 [astro-ph.EP].

+15 additional co-authored paper as observer with MuSCAT instruments.

Talks

- Jul 2025 *Identifying hot Jupiters that arrived via disk migration*, Detection and Dynamics of Exoplanets, Coimbra, Portugal
- May 2025 Identifying hot Jupiters that arrived via disk migration, Japan Geoscience Union Meeting, Chiba, Japan

- Oct 2024 The Potentially Decaying Orbit of an Ultra-Hot Jupiter, Exoclock Annual Meeting, Lisbon, Portugal
- May 2023 The flipped orbit of KELT-19Ab inferred from the symmetric TESS light curves, JpGU Meeting, Chiba, Japan
 - +3 additional oral presentations in domestic conferences

Posters

Mar 2024 The flipped orbit of KELT-19Ab inferred from the symmetric TESS light curves, Extreme Solar Systems V, Christchurch, New Zealand

Colloquia

- Jul 2025 Tracing the Tidal Footprints of Hot Jupiter Migration, Geneva Observatory Exoplanet Seminar, Switzerland
- Jun 2025 Tracing the Tidal Footprints of Hot Jupiter Migration, Subaru Seminar, Hawaii, USA
- Feb 2024 A hot Jupiter not easily explained with conventional high-eccentricity migration, Nagoya University Theoretical Astrophysics Group, Nagoya, Japan
- Dec 2023 Observation as a tool to probe planet migration, Komaba Science Club, Tokyo, Japan

Grants and Funding

- 2025–2027 JSPS Grant-in-Aid for Young Scientists (DC2), Grant No. 25KJ1036
- 2022–2024 JASSO Scholarship, Japan Student Service Organization
 - Oct 2024 JST SPRING-GX International Conference Grant (Lisbon), Grant No. JPMJSP2108
- Mar 2024 Intl. Conference Grant (Christchurch), Foundation for Promotion of Astronomy

Accepted Observing Proposals

- 2025A **MOIRCS/Subaru**, PI: Yugo Kawai Confirmation of first orbital decay of a hot Jupiter around a low-mass star (0.5 nights)
- 2024B **MAROON-X/Gemini**, PI: Yugo Kawai Obliquity measurement to search for protoplanetary disk misalignment (0.5 nights, Subaru Time Exchange)

Teaching

- 2024– **Astrophysics Lab**, Teaching Assistant, *Astrophysics and data analysis using Python.*
- 2024 Fall **Undergraduate research program**, Teaching Assistant, *Exoplanet photometric data analysis using Python.*

Awards

2023 Ichiko Commemorative Award, Outstanding Master's Thesis Award, University of Tokyo

Languages

Japanese Native

English Fluent Academic and professional use

Python Proficient

For data analysis, modeling, and automation