# Yugo KAWAI

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

*yugo6581@gmail.com*
*ykawai6581.github.io/home*
*ORCID: 0000-0002-0488-6297*

## Profile

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

## Education

2024– Expected 2027 **Ph.D.**, *The University of Tokyo*, Tokyo, Japan
Graduate School of Arts and Sciences
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)
Supervisor: Prof. Norio Narita

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., A. Fukui, N. Watanabe, S. Fukazawa, and N. Narita (Nov. 2025). "Identifying Close-in Jupiters that Arrived via Disk Migration: Evidence of Primordial Alignment, Preference of Nearby Companions and Hint of Runaway Migration". In: *The Astronomical Journal* 170.6, p. 299. DOI: 10.3847/1538-3881/ae0a11. URL: https://doi.org/10.3847/1538-3881/ae0a11.

**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.

— +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*, Japan Geoscience Union 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

Nov 2025* NAOJ Planetary Seminar, Tokyo, Japan

Jul 2025 Geneva Observatory Exoplanet Seminar, Geneva Switzerland

Jun 2025 Subaru Seminar, Hawaii, USA

Feb 2024 Nagoya University Theoretical Astrophysics Group, Nagoya, Japan

Dec 2023 Komaba Science Club, Tokyo, Japan

*Invited

## 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 proto-planetary disk misalignment (0.5 nights, Subaru Time Exchange)*

## Teaching

2024–Present **Astrophysics Lab**, Teaching Assistant, UTokyo — *Astrophysics using Python.*

2024 Fall **Undergraduate research program**, Teaching Assistant, UTokyo — *Exoplanet photometric data analysis using Python. (Advised two undergraduate students)*

## 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* |