

# Jerome Pitogo de Leon, Ph.D.

Postdoctoral researcher at The University of Tokyo

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## Overview

**Research:** Author of 88 refereed publications in exoplanet science with 2,083 total citations and an h-index of 29 (as of 2026-02-28).<sup>1</sup> Research focuses on the discovery and characterization of transiting exoplanets using space- and ground-based telescopes and advanced data analyses.

**Teaching:** Designed and delivered introductory astronomy courses for undergraduates, five of whom subsequently pursued graduate studies in the Philippines and abroad.

**Mentorship:** Supervised 2 PhD, 2 master's, and 4 undergraduate students on astronomy research projects. Developed publicly available software tools to support research and instruction.

**Outreach:** Delivered invited talks for academic and public audiences and founded an astronomy community initiative to promote engagement in astronomy.

## Education

### PhD in Astronomy, 2021

Department of Astronomy, The University of Tokyo, Japan

Dissertation: *Discovery and Characterization of Transiting Exoplanets with Diverse Radii and Ages* ([online](#))

Advisor: [Prof. Motohide Tamura](#)

### MSc in Astronomy, 2018

Department of Astronomy, The University of Tokyo, Japan

Thesis: *Multi-color Simultaneous Transit Observations of Low-density Hot Jupiters* ([online](#))

Advisor: Prof. Motohide Tamura

### BSc in Physics, 2013

Department of Physics, University of the Philippines Los Baños, Laguna, Philippines

Thesis: *Thermal Differential and Image Analysis of a Fabricated 11-cm Solar Telescope Using an Active-Passive Cooling System*

Advisor: [Dr. Rogel Mari Sese](#)

## Full-time Work Experience

### Project Assistant Professor (2025/4–Present)

*Komaba Institute for Science, Graduate School of Arts and Sciences, The University of Tokyo, Japan*

*Role: Lead coordination of observations and data analysis with [MuSCAT4](#) under the JSPS [Kiban S](#) project, including planning observing campaigns, overseeing data reduction, and*

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<sup>1</sup>Publication metrics from NASA ADS.

*maintaining analysis workflows.*

**Project Research Assistant (2023/4–2025/3)**

*Department of Multi-Disciplinary Sciences, Graduate School of Arts and Sciences, The University of Tokyo, Japan*

*Role: Led the discovery and detailed characterization of young transiting exoplanets using TESS photometry, including target vetting, light-curve modeling, and follow-up coordination.*

*Advisor: Prof. Norio Narita (see de Leon et al. 2023)*

**Project Research Assistant (2021/4–2023/3)**

*Department of Astronomy, Graduate School of Science, The University of Tokyo, Japan*

*Role: Coordinated an international collaboration that identified 37 transiting exoplanets from Kepler data, performing transit detection, validation, and system characterization.*

*Advisor: Prof. Motohide Tamura (see de Leon et al. 2021)*

**Research Development Assistant (2013/4–2014/6)**

*Regulus SpaceTech, Inc., Los Baños, Laguna, Philippines*

*Role: Initiated and implemented software for automated solar telescope control and data analysis.*

*Advisor: Dr. Rogel Sese*

**Temporary Positions****Consultant (2024/6–Present)**

*Telos Media ([www.telos.so](http://www.telos.so))*

*Role: Accuracy reviewer of Astronomy-related long-form educational videos published on youtube.*

**Remote Lecturer (2021/6–2021/10)**

*Faculty of Aerospace Engineering, School of Engineering & Architecture, Ateneo de Davao University, Philippines*

*Role: Designed and delivered lectures on introductory astronomy and astronomical data analysis for senior undergraduates.*

**Technical Assistant (2018/10–2019/3)**

*Engineering Department, The University of Tokyo, Japan*

*Role: Designed and implemented image-processing software for stitching featureless high-resolution images.*

*Advisor: Assoc. Prof. Tomohiko Hayakawa (see Murakami et al. 2018)*

**Research Assistant (2017/4–2018/3)**

*Department of Astronomy, The University of Tokyo, Japan*

*Role: Designed a pipeline for modeling and analyzing multi-wavelength transit light curves and mentored new group members in its use.*

**Research Student (2015/9–2016/3)**

*Department of Astronomy, Graduate University for Advanced Studies (SOKENDAI), Japan*

*Role: Conducted data reduction and analysis of high-resolution astronomical images and prepared technical content for scientific reports.*

*Advisor: Dr. Satoshi Mayama*

**Intern (2014/7–2014/9)**

*Academia Sinica Institute for Astronomy and Astrophysics (ASIAA), Taipei, Taiwan*

*Role: Developed an image-processing pipeline to analyze high-resolution images of a young forming star using the 8-m Subaru Telescope.*

*Advisor: Dr. Michihiro Takami (see de Leon et al. 2015)*

## Publications

refereed: 88 / first author: 3 / citations: 2,083 / h-index: 29 (as of 2026-02-28)

- 88 Livingston, John H.; Petigura, Erik A.; David, Trevor J.; Masuda, Kento; *et al.* (incl. **de Leon, J. P.**), 2026, *A young progenitor for the most common planetary systems in the Galaxy*, *Nature*, **649**, 310 ([arXiv:2601.10598](#))
- 87 Morello, G.; Peláez-Torres, A.; Pozuelos, F. J.; Dévora-Pajares, M.; *et al.* (incl. **de Leon, J. P.**), 2026, *The K-dwarfs Survey I. Four Validated Planets from the Radius Valley to the Neptune Desert*, *Monthly Notices of the Royal Astronomical Society*
- 86 Ikuta, Kai; Narita, Norio; Takarada, Takuya; Hirano, Teruyuki; *et al.* (incl. **de Leon, J. P.**), 2025, *The mass of TOI-654 b: A short-period sub-Neptune transiting a mid-M dwarf*, *Publications of the Astronomical Society of Japan*, **77**, 1101 ([arXiv:2507.16222](#))
- 85 Mori, Mayuko; Fukui, Akihiko; Hirano, Teruyuki; Narita, Norio; *et al.* (incl. **de Leon, J. P.**), 2025, *Multiband, Multiepoch Photometry of the Spot-crossing System TOI-3884: Refined System Geometry and Spot Properties*, *The Astronomical Journal*, **170**, 204 ([arXiv:2506.06445](#)) [5 citations]
- 84 Yee, Samuel W.; Winn, Joshua N.; Hartman, Joel D.; Rodriguez, Joseph E.; *et al.* (incl. **de Leon, J. P.**), 2025, *The TESS Grand Unified Hot Jupiter Survey. III. Thirty More Giant Planets*, *The Astrophysical Journal Supplement Series*, **280**, 30 ([arXiv:2507.01855](#)) [4 citations]
- 83 Gomez Barrientos, Jonathan; Greklek-McKeon, Michael; Knutson, Heather A.; Giacalone, Steven; *et al.* (incl. **de Leon, J. P.**), 2025, *Validation of TESS Planet Candidates with Multicolor Transit Photometry and TRICERATOPS+*, *The Astronomical Journal*, **170**, 148 ([arXiv:2508.02782](#)) [3 citations]
- 82 Vowell, Noah; Rodriguez, Joseph E.; Latham, David W.; Quinn, Samuel N.; *et al.* (incl. **de Leon, J. P.**), 2025, *Eleven New Transiting Brown Dwarfs and Very-low-mass Stars from TESS*, *The Astronomical Journal*, **170**, 68 ([arXiv:2501.09795](#)) [15 citations]
- 81 Geraldía-González, S.; Orell-Miquel, J.; Pallé, E.; Murgas, F.; *et al.* (incl. **de Leon, J. P.**), 2025, *Discovery of a transiting hot water-world candidate orbiting Ross 176 with TESS and CARMENES*, *Astronomy and Astrophysics*, **700** ([arXiv:2507.15763](#)) [2 citations]
- 80 Soubkiou, Abderahmane; Barkaoui, Khalid; Benkhaldoun, Zouhair; Ghachoui, Mourad; *et al.* (incl. **de Leon, J. P.**), 2025, *TOI-1846 b: a super-Earth in the radius valley orbiting a nearby M dwarf*, *Monthly Notices of the Royal Astronomical Society*, **541**, 3249 ([arXiv:2506.18550](#))
- 79 Greklek-McKeon, Michael; Vissapragada, Shreyas; Knutson, Heather A.; Fukui, Akihiko; *et al.* (incl. **de Leon, J. P.**), 2025, *Tidally Heated Sub-Neptunes, Refined Planetary Compositions, and Confirmation of a Third Planet in the TOI-1266 System*, *The Astronomical Journal*, **169**, 292 ([arXiv:2409.16374](#)) [3 citations]
- 78 Fairnington, Tyler R.; Dong, Jiayin; Huang, Chelsea X.; Nabbie, Emma; *et al.* (incl. **de Leon, J. P.**), 2025, *The eccentricity distribution of warm sub-Saturns in TESS*, *Monthly Notices of the Royal Astronomical Society*, **540**, 1144 ([arXiv:2505.04106](#)) [2 citations]

- 77 Barkaoui, K.; Korth, J.; Gaidos, E.; Agol, E.; *et al.* (incl. **de Leon, J. P.**), 2025, *TOI-2015 b: A sub-Neptune in strong gravitational interaction with an outer non-transiting planet*, *Astronomy and Astrophysics*, **695** (arXiv:2502.07074) [5 citations]
- 76 Masuda, Kento; Libby-Roberts, Jessica E.; Livingston, John H.; Stevenson, Kevin B.; *et al.* (incl. **de Leon, J. P.**), 2024, *A Fourth Planet in the Kepler-51 System Revealed by Transit Timing Variations*, *The Astronomical Journal*, **168**, 294 (arXiv:2410.01625) [14 citations]
- 75 Ehrhardt, Juliana; Thomas, Luis; Kellermann, Hanna; Freitag, Christine; *et al.* (incl. **de Leon, J. P.**), 2024, *Confirmation of four hot Jupiters detected by TESS using follow-up spectroscopy from MaHPS at Wendelstein together with NEID and TRES*, *Astronomy and Astrophysics*, **692** (arXiv:2501.04383) [2 citations]
- 74 Peláez-Torres, A.; Esparza-Borges, E.; Pallé, E.; Parviainen, H.; *et al.* (incl. **de Leon, J. P.**), 2024, *Validation of up to seven TESS planet candidates through multi-colour transit photometry using MuSCAT2 data*, *Astronomy and Astrophysics*, **690** (arXiv:2409.07400) [6 citations]
- 73 Ghachoui, M.; Rackham, B. V.; Dévora-Pajares, M.; Chouqar, J.; *et al.* (incl. **de Leon, J. P.**), 2024, *TESS discovery of two super-Earths orbiting the M-dwarf stars TOI-6002 and TOI-5713 near the radius valley*, *Astronomy and Astrophysics*, **690** (arXiv:2408.00709) [8 citations]
- 72 Hayashi, Yuya; Narita, Norio; Fukui, Akihiko; Changeat, Quentin; *et al.* (incl. **de Leon, J. P.**), 2024, *Low abundances of TiO and VO on the dayside of KELT-9 b: Insights from ground-based photometric observations*, *Publications of the Astronomical Society of Japan*, **76**, 1131 (arXiv:2408.15698) [2 citations]
- 71 Orell-Miquel, J.; Murgas, F.; Pallé, E.; Mallorquín, M.; *et al.* (incl. **de Leon, J. P.**), 2024, *The MOPYS project: A survey of 70 planets in search of extended He I and H atmospheres: No evidence of enhanced evaporation in young planets*, *Astronomy and Astrophysics*, **689** (arXiv:2404.16732) [39 citations]
- 70 Gaidos, E.; Parviainen, H.; Esparza-Borges, E.; Fukui, A.; *et al.* (incl. **de Leon, J. P.**), 2024, *Climate change in hell: Long-term variation in transits of the evaporating planet K2-22b*, *Astronomy and Astrophysics*, **688** (arXiv:2407.17372) [2 citations]
- 69 Gillon, Michaël; Pedersen, Peter P.; Rackham, Benjamin V.; Dransfield, Georgina; *et al.* (incl. **de Leon, J. P.**), 2024, *Detection of an Earth-sized exoplanet orbiting the nearby ultracool dwarf star SPECULOOS-3*, *Nature Astronomy*, **8**, 865 (arXiv:2406.00794) [14 citations]
- 68 Schulte, Jack; Rodriguez, Joseph E.; Bieryla, Allyson; Quinn, Samuel N.; *et al.* (incl. **de Leon, J. P.**), 2024, *Migration and Evolution of giant ExoPlanets (MEEP). I. Nine Newly Confirmed Hot Jupiters from the TESS Mission*, *The Astronomical Journal*, **168**, 32 (arXiv:2401.05923) [15 citations]
- 67 Barkaoui, K.; Schwarz, R. P.; Narita, N.; Mistry, P.; *et al.* (incl. **de Leon, J. P.**), 2024, *Three short-period Earth-sized planets around M dwarfs discovered by TESS: TOI-5720 b, TOI-6008 b, and TOI-6086 b*, *Astronomy and Astrophysics*, **687** (arXiv:2405.06350) [8 citations]
- 66 Kuzuhara, Masayuki; Fukui, Akihiko; Livingston, John H.; Caballero, José A.; *et al.* (incl. **de Leon, J. P.**), 2024, *Gliese 12 b: A Temperate Earth-sized Planet at 12 pc Ideal for Atmospheric Transmission Spectroscopy*, *The Astrophysical Journal*, **967** (arXiv:2405.14708) [20 citations]
- 65 Hori, Yasunori; Fukui, Akihiko; Hirano, Teruyuki; Narita, Norio; *et al.* (incl. **de Leon, J. P.**), 2024, *The Discovery and Follow-up of Four Transiting Short-period Sub-Neptunes Orbiting M*

- Dwarfs*, The Astronomical Journal, **167**, 289 (arXiv:2405.12637) [2 citations]
- 64 Hord, Benjamin J.; Kempton, Eliza M.-R.; Evans-Soma, Thomas M.; Latham, David W.; et al. (incl. **de Leon, J. P.**), 2024, *Identification of the Top TESS Objects of Interest for Atmospheric Characterization of Transiting Exoplanets with JWST*, The Astronomical Journal, **167**, 233 (arXiv:2308.09617) [35 citations]
- 63 Mori, Mayuko; Ikuta, Kai; Fukui, Akihiko; Narita, Norio; et al. (incl. **de Leon, J. P.**), 2024, *Characterization of starspots on a young M-dwarf K2-25: multiband observations of stellar photometric variability and planetary transits*, Monthly Notices of the Royal Astronomical Society, **530**, 167 (arXiv:2403.13946) [13 citations]
- 62 Murgas, F.; Pallé, E.; Orell-Miquel, J.; Carleo, I.; et al. (incl. **de Leon, J. P.**), 2024, *Wolf 327b: A new member of the pack of ultra-short-period super-Earths around M dwarfs*, Astronomy and Astrophysics, **684** (arXiv:2401.12150) [12 citations]
- 61 Serrano Bell, J.; Díaz, R. F.; Hébrard, G.; Martioli, E.; et al. (incl. **de Leon, J. P.**), 2024, *TOI-1199 b and TOI-1273 b: Two new transiting hot Saturns detected and characterized with SOPHIE and TESS*, Astronomy and Astrophysics, **684** (arXiv:2402.07861) [5 citations]
- 60 Parviainen, H.; Murgas, F.; Esparza-Borges, E.; Peláez-Torres, A.; et al. (incl. **de Leon, J. P.**), 2024, *TOI-2266 b: A keystone super-Earth at the edge of the M dwarf radius valley*, Astronomy and Astrophysics, **683** (arXiv:2401.11879) [5 citations]
- 59 Kang, H.; Chen, G.; Pallé, E.; Murgas, F.; et al. (incl. **de Leon, J. P.**), 2024, *Simultaneous multicolour transit photometry of hot Jupiters HAT-P-19b, HAT-P-51b, HAT-P-55b, and HAT-P-65b*, Monthly Notices of the Royal Astronomical Society, **528**, 1930 (arXiv:2401.03715) [4 citations]
- 58 Mallorquín, M.; Goffo, E.; Pallé, E.; Lodieu, N.; et al. (incl. **de Leon, J. P.**), 2023, *TOI-1801 b: A temperate mini-Neptune around a young M0.5 dwarf*, Astronomy and Astrophysics, **680** (arXiv:2310.10244) [11 citations]
- 57 Luque, R.; Osborn, H. P.; Leleu, A.; Pallé, E.; et al. (incl. **de Leon, J. P.**), 2023, *A resonant sextuplet of sub-Neptunes transiting the bright star HD 110067*, Nature, **623**, 932 (arXiv:2311.17775) [53 citations]
- 56 Gan, Tianjun; Cadieux, Charles; Jahandar, Farbod; Vazan, Allona; et al. (incl. **de Leon, J. P.**), 2023, *A Massive Hot Jupiter Orbiting a Metal-rich Early M Star Discovered in the TESS Full-frame Images*, The Astronomical Journal, **166**, 165 (arXiv:2307.07329) [14 citations]
- 55 Pallé, E.; Orell-Miquel, J.; Brady, M.; Bean, J.; et al. (incl. **de Leon, J. P.**), 2023, *GJ 806 (TOI-4481): A bright nearby multi-planetary system with a transiting hot low-density super-Earth*, Astronomy and Astrophysics, **678** (arXiv:2301.06873) [17 citations]
- 54 Hartman, J. D.; Bakos, G. Á.; Csubry, Z.; Howard, A. W.; et al. (incl. **de Leon, J. P.**), 2023, *TOI 4201 b and TOI 5344 b: Discovery of Two Transiting Giant Planets around M-dwarf Stars and Revised Parameters for Three Others*, The Astronomical Journal, **166**, 163 (arXiv:2307.06809) [19 citations]
- 53 Orell-Miquel, J.; Lampón, M.; López-Puertas, M.; Mallorquín, M.; et al. (incl. **de Leon, J. P.**), 2023, *Confirmation of an He I evaporating atmosphere around the 650-Myr-old sub-Neptune HD 235088 b (TOI-1430 b) with CARMENES*, Astronomy and Astrophysics, **677** (arXiv:2307.05191) [24 citations]
- 52 Kagitani, Taiki; Narita, Norio; Kimura, Tadahiro; Hirano, Teruyuki; et al. (incl. **de Leon, J. P.**), 2023, *The mass of TOI-519 b: A close-in giant planet transiting a metal-rich mid-M*



- dwarf*, Publications of the Astronomical Society of Japan, **75**, 713 ([arXiv:2304.14703](#)) [23 citations]
- 51 **de Leon, J. P.**; Livingston, J. H.; Jenkins, J. S.; Vines, J. I.; *et al.*, 2023, *A sub-Neptune transiting the young field star HD 18599 at 40 pc*, Monthly Notices of the Royal Astronomical Society, **522**, 750 ([arXiv:2210.08179](#)) [4 citations]
- 50 Morello, G.; Parviainen, H.; Murgas, F.; Pallé, E.; *et al.* (incl. **de Leon, J. P.**), 2023, *TOI-1442 b and TOI-2445 b: Two potentially rocky ultra-short period planets around M dwarfs*, Astronomy and Astrophysics, **673** ([arXiv:2201.13274](#)) [10 citations]
- 49 Vines, Jose I.; Jenkins, James S.; Berdiñas, Zaira; Soto, Maritza G.; *et al.* (incl. **de Leon, J. P.**), 2023, *A dense mini-Neptune orbiting the bright young star HD 18599*, Monthly Notices of the Royal Astronomical Society, **518**, 2627 ([arXiv:2210.07945](#)) [12 citations]
- 48 Kawauchi, K.; Murgas, F.; Pallé, E.; Narita, N.; *et al.* (incl. **de Leon, J. P.**), 2022, *Validation and atmospheric exploration of the sub-Neptune TOI-2136b around a nearby M3 dwarf*, Astronomy and Astrophysics, **666** ([arXiv:2202.10182](#)) [10 citations]
- 47 Carmichael, Theron W.; Irwin, Jonathan M.; Murgas, Felipe; Pallé, Enric; *et al.* (incl. **de Leon, J. P.**), 2022, *TOI-2119: a transiting brown dwarf orbiting an active M-dwarf from NASA's TESS mission*, Monthly Notices of the Royal Astronomical Society, **514**, 4944 ([arXiv:2202.08842](#)) [21 citations]
- 46 Mori, Mayuko; Livingston, John H.; **de Leon, J. P.**; Narita, Norio; *et al.*, 2022, *TOI-1696: A Nearby M4 Dwarf with a 3 R<sub>⊕</sub> Planet in the Neptunian Desert*, The Astronomical Journal, **163**, 298 ([arXiv:2203.02694](#)) [16 citations]
- 45 Christian, Sam; Vanderburg, Andrew; Becker, Juliette; Yahalomi, Daniel A.; *et al.* (incl. **de Leon, J. P.**), 2022, *A Possible Alignment Between the Orbits of Planetary Systems and their Visual Binary Companions*, The Astronomical Journal, **163**, 207 ([arXiv:2202.00042](#)) [47 citations]
- 44 Watanabe, Noriharu; Narita, Norio; Pallé, Enric; Fukui, Akihiko; *et al.* (incl. **de Leon, J. P.**), 2022, *Nodal precession of WASP-33b for 11 yr by Doppler tomographic and transit photometric observations*, Monthly Notices of the Royal Astronomical Society, **512**, 4404 ([arXiv:2203.02003](#)) [15 citations]
- 43 Fukui, Akihiko; Kimura, Tadahiro; Hirano, Teruyuki; Narita, Norio; *et al.* (incl. **de Leon, J. P.**), 2022, *TOI-2285b: A 1.7 Earth-radius planet near the habitable zone around a nearby M dwarf*, Publications of the Astronomical Society of Japan, **74** ([arXiv:2110.10215](#)) [14 citations]
- 42 Castro-González, A.; Díez Alonso, E.; Menéndez Blanco, J.; Livingston, J.; *et al.* (incl. **de Leon, J. P.**), 2022, *The K2-OjOS Project: New and revisited planets and candidates in K2 campaigns 5, 16, & 18*, Monthly Notices of the Royal Astronomical Society, **509**, 1075 ([arXiv:2109.03346](#)) [26 citations]
- 41 Wong, Ian; Shporer, Avi; Zhou, George; Kitzmann, Daniel; *et al.* (incl. **de Leon, J. P.**), 2021, *TOI-2109: An Ultrahot Gas Giant on a 16 hr Orbit*, The Astronomical Journal, **162**, 256 ([arXiv:2111.12074](#)) [44 citations]
- 40 Garai, Z.; Pribulla, T.; Parviainen, H.; Pallé, E.; *et al.* (incl. **de Leon, J. P.**), 2021, *Is the orbit of the exoplanet WASP-43b really decaying? TESS and MuSCAT2 observations confirm no detection*, Monthly Notices of the Royal Astronomical Society, **508**, 5514 ([arXiv:2110.04761](#)) [13 citations]

- 39 **de Leon, J. P.**; Livingston, J.; Endl, M.; Cochran, W. D.; *et al.*, 2021, *37 new validated planets in overlapping K2 campaigns*, Monthly Notices of the Royal Astronomical Society, **508**, 195 (arXiv:2108.05621) [29 citations]
- 38 Scarsdale, Nicholas; Murphy, Joseph M. Akana; Batalha, Natalie M.; Crossfield, Ian J. M.; *et al.* (incl. **de Leon, J. P.**), 2021, *TESS-Keck Survey. V. Twin Sub-Neptunes Transiting the Nearby G Star HD 63935*, The Astronomical Journal, **162**, 215 (arXiv:2110.06885) [16 citations]
- 37 Hirano, Teruyuki; Livingston, John H.; Fukui, Akihiko; Narita, Norio; *et al.* (incl. **de Leon, J. P.**), 2021, *Two Bright M Dwarfs Hosting Ultra-Short-Period Super-Earths with Earth-like Compositions*, The Astronomical Journal, **162**, 161 (arXiv:2103.12760) [31 citations]
- 36 Teske, Johanna; Wang, Sharon Xuesong; Wolfgang, Angie; Gan, Tianjun; *et al.* (incl. **de Leon, J. P.**), 2021, *The Magellan-TESS Survey. I. Survey Description and Midsurvey Results*, The Astrophysical Journal Supplement Series, **256**, 33 (arXiv:2011.11560) [42 citations]
- 35 Fukui, A.; Korth, J.; Livingston, J. H.; Twicken, J. D.; *et al.* (incl. **de Leon, J. P.**), 2021, *TOI-1749: an M dwarf with a Trio of Planets including a Near-resonant Pair*, The Astronomical Journal, **162**, 167 (arXiv:2107.05430) [9 citations]
- 34 Trifonov, T.; Caballero, J. A.; Morales, J. C.; Seifahrt, A.; *et al.* (incl. **de Leon, J. P.**), 2021, *A nearby transiting rocky exoplanet that is suitable for atmospheric investigation*, Science, **371**, 1038 (arXiv:2103.04950) [74 citations]
- 33 Parviainen, H.; Pallé, E.; Zapatero-Osorio, M. R.; Nowak, G.; *et al.* (incl. **de Leon, J. P.**), 2021, *TOI-519 b: A short-period substellar object around an M dwarf validated using multicolour photometry and phase curve analysis*, Astronomy and Astrophysics, **645** (arXiv:2011.11458) [30 citations]
- 32 Chen, G.; Pallé, E.; Parviainen, H.; Wang, H.; *et al.* (incl. **de Leon, J. P.**), 2021, *An enhanced slope in the transmission spectrum of the hot Jupiter WASP-104b*, Monthly Notices of the Royal Astronomical Society, **500**, 5420 (arXiv:2011.06329) [18 citations]
- 31 Castro González, A.; Díez Alonso, E.; Menéndez Blanco, J.; Livingston, John H.; *et al.* (incl. **de Leon, J. P.**), 2020, *Planetary candidates transiting cool dwarf stars from campaigns 12 to 15 of K2*, Monthly Notices of the Royal Astronomical Society, **499**, 5416 (arXiv:2007.12744) [15 citations]
- 30 Narita, Norio; Fukui, Akihiko; Yamamuro, Tomoyasu; Harbeck, Daniel; *et al.* (incl. **de Leon, J. P.**), 2020, *MuSCAT3: a 4-color simultaneous camera for the 2m Faulkes Telescope North*, Proceedings of the SPIE, **11447** [23 citations]
- 29 Bouma, L. G.; Hartman, J. D.; Brahm, R.; Evans, P.; *et al.* (incl. **de Leon, J. P.**), 2020, *Cluster Difference Imaging Photometric Survey. II. TOI 837: A Young Validated Planet in IC 2602*, The Astronomical Journal, **160**, 239 (arXiv:2009.07845) [61 citations]
- 28 Kemmer, J.; Stock, S.; Kossakowski, D.; Kaminski, A.; *et al.* (incl. **de Leon, J. P.**), 2020, *Discovery of a hot, transiting, Earth-sized planet and a second temperate, non-transiting planet around the M4 dwarf GJ 3473 (TOI-488)*, Astronomy and Astrophysics, **642** (arXiv:2009.10432) [41 citations]
- 27 Nowak, G.; Luque, R.; Parviainen, H.; Pallé, E.; *et al.* (incl. **de Leon, J. P.**), 2020, *The CARMENES search for exoplanets around M dwarfs. Two planets on opposite sides of the radius gap transiting the nearby M dwarf LTT 3780*, Astronomy and Astrophysics, **642** (arXiv:2003.01140) [74 citations]

- 26 Luque, R.; Casasayas-Barris, N.; Parviainen, H.; Chen, G.; *et al.* (incl. **de Leon, J. P.**), 2020, *Obliquity measurement and atmospheric characterisation of the WASP-74 planetary system*, Astronomy and Astrophysics, **642** (arXiv:2007.11851) [18 citations]
- 25 Nowak, Grzegorz; Palles, Enric; Gandolfi, Davide; Deeg, Hans J.; *et al.* (incl. **de Leon, J. P.**), 2020, *K2-280 b - a low density warm sub-Saturn around a mildly evolved star*, Monthly Notices of the Royal Astronomical Society, **497**, 4423 (arXiv:2007.07939) [8 citations]
- 24 Nielsen, L. D.; Brahm, R.; Bouchy, F.; Espinoza, N.; *et al.* (incl. **de Leon, J. P.**), 2020, *Three short-period Jupiters from TESS. HIP 65Ab, TOI-157b, and TOI-169b*, Astronomy and Astrophysics, **639** (arXiv:2003.05932) [35 citations]
- 23 Šubjak, Ján; Sharma, Rishikesh; Carmichael, Theron W.; Johnson, Marshall C.; *et al.* (incl. **de Leon, J. P.**), 2020, *TOI-503: The First Known Brown-dwarf Am-star Binary from the TESS Mission*, The Astronomical Journal, **159**, 151 (arXiv:1909.07984) [51 citations]
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## Awards

**2022/12:** St. Joseph's Academy Centennial Achiever's Award  
**2021/3:** Philippine Embassy in Japan Medal for Distinguished Filipino Graduates  
**2018/4–2021/3:** MEXT PhD Scholarship, Ministry of Education, Culture, Sports, Science and Technology (JPY 8.4M)  
**2016/4–2018/3:** MEXT MSc Scholarship (JPY 5.6M)  
**2015/4–2016/3:** MEXT Japanese Language and Research Scholarship (JPY 2.8M)  
**2015/10–2016/3:** Research Grant, Graduate University for Advanced Studies (JPY 0.2M)  
**2014/9:** SanDisk Japan Scholarship (USD 3.75k, deferred)  
**2013/3:** International Space University Scholarship (EUR 9k, deferred)  
**2011–present:** Multiple travel grants for data science workshops and research conferences, including observation runs in the U.S., Europe, South Africa, and Southeast Asia

## Teaching and Mentorships

**Designed and Taught Courses:** Created and delivered two elective courses for 4th-year Aerospace Engineering undergraduates at the [Ateneo de Davao University](#) during the 2nd semester of 2021.

**Research Collaborations:** Collaborated with several international teams on multi-year projects resulting in research publications in high-impact, peer-reviewed journals.

**Pipeline Development:** Developed publicly available Python code to analyze data from the TESS telescope for research and instructional use (see [github.com/jpdeleon/quicklook](https://github.com/jpdeleon/quicklook)).

**Undergraduate Thesis Advisory:** Mentored K.M. Shariat on Bayesian Statistical Modeling; mentored K. Uno on estimating stellar ages using multiple techniques as part of a Research Introduction class; mentored H. Kobayashi on developing a pipeline to find young transiting planets and binary stars in nearby clusters (see [github.com/hiremasa/ytps](https://github.com/hiremasa/ytps)). Also advised A. Nodado on an undergraduate thesis on variable star characterization.

**MEXT Scholarship Guidance:** Guided A. Javier and C. Cabatlao from application to acceptance, supporting their successful pursuit of graduate studies in Japan.

## Trainings and Workshops

University of Tokyo Faculty Development ([UTokyo FD Open](#)) Program, Tokyo, Japan, Oct 2025–Feb 2026

[5th ExoClock Meeting](#), Madrid, Spain, Oct 4–6, 2025

[ARIEL Consortium Meeting](#), Madrid, Spain, Sep 30–Oct 4, 2025

[Young Transiting Planet Workshop 2025](#), Ishigaki, Japan, Mar 12–15, 2025

[JWST Data Analysis Workshop](#), Chiang Mai, Thailand, Jun 24–Jul 5, 2024

Japan Planetary Atmosphere Research Society Workshop II, Atami, Japan, Mar 2023

Japan Planetary Atmosphere Research Society Workshop, Matsushima, Miyagi, Japan, Mar 2022

RESCEU Symposium: From Protoplanetary Disks through Planetary System Architecture to Planetary Atmospheres and Habitability, Okinawa, Japan, Oct 14–18, 2019

[1st NARIT–EACOA Summer Workshop on Astrostatistics and Informatics](#), Chiang Mai,

Thailand, Aug 13–17, 2019  
Telluric Line Hack Week, Flatiron Institute, New York, USA, Feb 25–28, 2019  
[NASA Sagan Exoplanet Summer Workshop](#), NASA Exoplanet Science Institute, California  
Institute of Technology, Pasadena, CA, USA, Jul 23–27, 2018  
Japan Geoscience Union Meeting, Chiba, Japan, May 20–24, 2018  
2nd Rencontres du Vietnam on Exoplanetary Science, Binh Dinh, Vietnam, Feb 2018  
TIARA Summer School on Astrostatistics and Big Data, Taipei, Taiwan, Sep 4–8, 2017  
Astronomy Hack Week, University of Washington, Seattle, WA, USA, Aug 28–Sep 1, 2017  
Protoplanetary Disk Dynamics and Planet Formation Workshop, Yokohama Institute for Earth  
Sciences (JAMSTEC), Kanagawa, Japan, Sep 29–Oct 2, 2015  
27th Spring School in Particles and Fields, Chang Gung University, Taoyuan City, Taiwan, Apr  
2–5, 2014  
NARIT–KASI Radio Astronomy Winter School, Chiang Mai, Thailand, Jan 27–30, 2014  
TEDx Diliman: Things That Matter, UP Diliman, Philippines, Oct 20, 2013  
2nd Southeast Asian Astronomers Collaboration Meeting, Bandung, Indonesia, Nov 18–22, 2013  
Sokendai Asian Winter School on Exoplanets, National Astronomical Observatory of Japan  
(NAOJ), Mitaka, Tokyo, Japan, Dec 3–5, 2012  
1st Southeast Asian Astronomers Collaboration Meeting, Palawan, Philippines, Nov 5–7, 2012  
Astronomy Training Workshop for Science Educators, Galileo Teacher Training Program  
(GTTP), UP Los Baños, Philippines, Apr 9–11, 2012  
The Universe Survives 2012, NIDO Science Discovery Center, SM Mall of Asia, Pasay City,  
Philippines, Feb 18 and 24, 2012  
Search for Undiscovered Main Belt Asteroids and Other Important NEO Observations,  
International Asteroid Campaign (IASC), Philippines, Apr 20–May 20, 2012  
29th Samahang Pisika ng Pilipinas (Physics Society of the Philippines) National Physics  
Congress, National Institute of Physics, College of Science, UP Diliman, Philippines, Oct  
24–26, 2011  
International Astronomical Union (IAU) Gala Night, NIDO Discovery Center, SM Mall of Asia,  
Pasay City, Philippines, Oct 21, 2011  
Developing Astronomy Education and Research in the Philippines, UP Los Baños, Philippines,  
Oct 20, 2011

## Field Work Experiences

2022–present: Regular remote observations using the LCO Global Telescope Network  
2018–present: Bi-monthly observations with the MuSCAT2/TCS telescope, Teide Observatory,  
Tenerife, Spain (remote)  
2022–2023: Monthly remote observations with the Subaru/IRD telescope intensive program  
(remote; PI: Norio Narita)  
2018–2020: MuSCAT2/TCS telescope, Teide Observatory, Tenerife, Spain (on-site)  
2018: SIRIUS/IRSF telescope, Sutherland, South Africa (on-site, 2 weeks)  
2018: IRCS/Subaru telescope, Mauna Kea Observatory, Hawaii, USA (on-site, 3 nights)  
2017: CHARIS/Subaru telescope, Mauna Kea Observatory, Hawaii, USA (on-site, 2 nights)

2017: HDS/Gemini telescope, Mauna Kea Observatory, Hawaii, USA (on-site, 1 night)

2017–2019: MuSCAT2/OAO telescope, Japan (on-site, 20+ nights)

## Outreach Activities

Resource speaker for Junior High School Career Week, SJASQ, Philippines, Jan 24, 2026

Guest on a podcast titled “Are We Alone?” (published on [Spotify](#)), Dec 2025

Resource speaker for Philippine Astronomy Week 2024 led by PAGASA, Philippines, Feb 2024

Featured by Pinoy Scientists ([Jan 2023](#))

Resource speaker for Science Week at De La Salle Integrated School, Philippines, Mar 2022

Resource speaker for the Philippine Science High School–Western Visayas Campus, Philippines, Mar 2021

Courtesy call with the Director of the Philippine Space Agency (PhilSA), Mar 2021

Invited speaker at the National Institute of Physics, University of the Philippines Diliman (UPD), Jan 2020

Astronomy Over Coffee (self-funded astronomy event), UP Diliman Hotel, Sep 2019

Founder of the Filipino Astronomy Community ([FAC](#); 2016)

Invited speaker at Philippine Rural High School, Los Baños, Philippines, Apr 2014

Invited speaker at St. Joseph’s Academy Sariaya (SJASQ) High School, Philippines, Apr 2013

## Affiliations and Services

Monthly Notices of the Royal Astronomical Society ([MNRAS](#); Impact Factor: 4.8; active referee)

SPACETIDE Foundation ([spacetide.jp](#); active intern, 2022–present)

Science Integrated Direction for High School Investigators ([SIDHI](#); mentor, 2022–present)

Science and Technology Advisory Council–Japan Chapter ([STAC-J](#); member, 2019–present)

Exoplanet Follow-up Observing Program ([ExoFOP](#); member, 2018–present)

Association of Filipino Students in Japan ([AFSJ](#); president, 2017–2018)

Association of Filipino Scholars in Taiwan ([AFST](#); founding member, 2014)

[Gawad Kalinga](#) (volunteer, 2009–2013)