

Jerome Pitogo de Leon, Ph.D.

Postdoctoral researcher at The University of Tokyo

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Overview

Research: Published 86 refereed papers mainly about exoplanets with 1,908 total citations, and an h-index of 28, as of 2025-11-01¹.

Teaching: Conducted 2 introductory courses in Astronomy for undergraduates; half of the class pursued graduate studies both in the Philippines and abroad.

Mentorship: Guided a dynamic research group consisting of 1 PhD, 3 master, and 2 undergraduate students in cutting-edge exoplanet research initiatives. Developed publicly available code for Astronomy research and instruction.

Outreach: Presented several invited talks over the years, contributing to both research and public outreach. Founded Astronomy group for fostering a passion for the cosmos.

Education

PhD, 2021 Department of Astronomy, The University of Tokyo, Japan.

Title: Discovery and Characterization of Transiting Exoplanets with Diverse Radii and Ages ([online version](#)). Advisor: [Prof. Motohide Tamura](#)

MSc, 2018 Department of Astronomy, The University of Tokyo, Japan.

Title: Multi-color Simultaneous Transit Observations of Low Density Hot Jupiters ([online version](#)). Advisor: Prof. Motohide Tamura

BSc, 2013

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

Title: 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: Management of observations and data analysis with [MuSCAT4](#) under the [Kiban S](#) project.

Project Research Assistant (2023/4 - 2025/3)

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

Role: Spearheading the discovery and in-depth characterization of young transiting exoplanets using the TESS telescope. Advisor: [Prof. Norio Narita](#) (Refer to [de Leon et al. 2023](#))

Project Research Assistant (2021/4 - 2023/3)

¹Publication data collected from [NASA Astrophysics Data System](#)

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

Role: Led an international group of astronomers towards the discovery of 37 new transiting exoplanets using the Kepler telescope. Advisor: Prof. Motohide Tamura (Refer to de Leon et al. 2021)

Research Development Assistant (2013/4-2014/6)

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

Role: Initiated the software development for automating solar telescope control and data analysis. Advisor: Dr. Rogel Sese

Temporary Positions

Remote Lecturer (2021/6 - 2021/10)

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

Role: Crafted and conducted lectures on Introduction to Astronomy & Astronomical Data Analysis.

Technical Assistant (2018/10-2019/3)

Engineering Department, The University of Tokyo, Japan

Role: Developed innovative image processing software for stitching featureless high-resolution images Advisor: Assoc. Prof. Tomohiko Hayakawa (Refer to Murakami et al. 2018)

Research Assistant (2017/4-2018/3)

Department of Astronomy, The University of Tokyo, Japan

Role: Developed a robust pipeline for modeling and analyzing multi-wavelength transit light curves and provided mentorship to new research group members.

Research Student (2015/9-2016/3)

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

Role: Worked on data reduction and analysis of high-resolution astronomical images and contributed to scientific report writing. 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 for the analysis of high-resolution images of a young forming star using the 8-m Subaru telescope. Advisor: Dr. Michihiro Takami (Refer to de Leon et al. 2015)

Publications

refereed: 86 / first author: 3 / citations: 1,908 / h-index: 28 (as of 2025-11-01)

- 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) [3 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)
- 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)
- 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) [9 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)
- 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)
- 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)
- 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) [2 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) [10 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) [5 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) [6 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)
- 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) [31 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) [9 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) [9 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) [7 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) [16 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) [30 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) [7 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) [11 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) [3 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) [4 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) [3 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) [10 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) [45 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 Palle, 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) [16 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) [18 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) [21 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) [22 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) [10 citations]
- 48 Kawauchi, K.; Murgas, F.; Palle, 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) [17 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_⊕ 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) [41 citations]
- 44 Watanabe, Noriharu; Narita, Norio; Palles, 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) [12 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) [23 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) [39 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) [26 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) [15 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) [30 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) [41 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) [72 citations]
- 33 Parviainen, H.; Palles, 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) [27 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) [17 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) [16 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) [59 citations]
 - 28 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) [71 citations]
 - 27 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) [39 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; Palle, 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) [31 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) [48 citations]
 - 22 Hidalgo, D.; Pallé, E.; Alonso, R.; Gandolfi, D.; *et al.*, 2020, *Three planets transiting the evolved star EPIC 249893012: a hot 8.8-M_⊕ super-Earth and two warm 14.7 and 10.2-M_⊕ sub-Neptunes*, Astronomy and Astrophysics, **636** (arXiv:2002.01755) [21 citations]
 - 21 Lam, Kristine W. F.; Korth, Judith; Masuda, Kento; Csizmadia, Szilárd; *et al.* (incl. **de Leon, J. P.**), 2020, *It Takes Two Planets in Resonance to Tango around K2-146*, The Astronomical Journal, **159**, 120 (arXiv:1907.11141) [20 citations]
 - 20 Parviainen, H.; Palle, E.; Zapatero-Osorio, M. R.; Montanes Rodriguez, P.; *et al.* (incl. **de Leon, J. P.**), 2020, *MuSCAT2 multicolour validation of TESS candidates: an ultra-short-period substellar object around an M dwarf*, Astronomy and Astrophysics, **633** (arXiv:1911.04366) [43 citations]

- 19 Mayama, Satoshi; Pérez, Sebastián; Kusakabe, Nobuhiko; Muto, Takayuki; *et al.* (incl. **de Leon, J. P.**), 2020, *Subaru Near-infrared Imaging Polarimetry of Misaligned Disks around the SR 24 Hierarchical Triple System*, The Astronomical Journal, **159**, 12 (arXiv:1911.10941) [8 citations]
- 18 Jenkins, James S.; Díaz, Matías R.; Kurtovic, Nicolás T.; Espinoza, Néstor; *et al.* (incl. **de Leon, J. P.**), 2020, *An ultrahot Neptune in the Neptune desert*, Nature Astronomy, **4**, 1148 (arXiv:2009.12832) [75 citations]
- 17 Barragán, O.; Aigrain, S.; Kubyskhina, D.; Gandolfi, D.; *et al.* (incl. **de Leon, J. P.**), 2019, *Radial velocity confirmation of K2-100b: a young, highly irradiated, and low-density transiting hot Neptune*, Monthly Notices of the Royal Astronomical Society, **490**, 698 (arXiv:1909.05252) [65 citations]
- 16 Fukui, A.; Suzuki, D.; Koshimoto, N.; Bachelet, E.; *et al.* (incl. **de Leon, J. P.**), 2019, *Kojima-1Lb Is a Mildly Cold Neptune around the Brightest Microlensing Host Star*, The Astronomical Journal, **158**, 206 (arXiv:1909.11802) [30 citations]
- 15 Quinn, Samuel N.; Becker, Juliette C.; Rodriguez, Joseph E.; Hadden, Sam; *et al.* (incl. **de Leon, J. P.**), 2019, *Near-resonance in a System of Sub-Neptunes from TESS*, The Astronomical Journal, **158**, 177 (arXiv:1901.09092) [47 citations]
- 14 Persson, Carina M.; Csizmadia, Szilárd; Mustill, Alexander J.; Fridlund, Malcolm; *et al.* (incl. **de Leon, J. P.**), 2019, *Greening of the brown-dwarf desert. EPIC 212036875b: a 51 M_J object in a 5-day orbit around an F7 V star*, Astronomy and Astrophysics, **628** (arXiv:1906.05048) [30 citations]
- 13 Hjorth, M.; Justesen, A. B.; Hirano, T.; Albrecht, S.; *et al.* (incl. **de Leon, J. P.**), 2019, *K2-290: a warm Jupiter and a mini-Neptune in a triple-star system*, Monthly Notices of the Royal Astronomical Society, **484**, 3522 (arXiv:1901.03716) [30 citations]
- 12 Akiyama, Eiji; Vorobyov, Eduard I.; Liu, Hauyu Baobabu; Dong, Ruobing; *et al.* (incl. **de Leon, J. P.**), 2019, *A Tail Structure Associated with a Protoplanetary Disk around SU Aurigae*, The Astronomical Journal, **157**, 165 (arXiv:1902.10306) [42 citations]
- 11 Hayakawa, Tomohiko; Murakami, Kenichi; **de Leon, J. P.**; & Ishikawa, Masatoshi, 2019, *Focus adjustable motion-blur compensation method using deformable mirror*, Proc. SPIE 10925, Photonic Instrumentation Engineering VI [2 citations]
- 10 Esposito, M.; Armstrong, D. J.; Gandolfi, D.; Adibekyan, V.; *et al.* (incl. **de Leon, J. P.**), 2019, *HD 219666 b: a hot-Neptune from TESS Sector 1*, Astronomy and Astrophysics, **623** (arXiv:1812.05881) [37 citations]
- 9 Livingston, John H.; Dai, Fei; Hirano, Teruyuki; Gandolfi, Davide; *et al.* (incl. **de Leon, J. P.**), 2019, *K2-264: a transiting multiplanet system in the Praesepe open cluster*, Monthly Notices of the Royal Astronomical Society, **484**, 8 (arXiv:1809.01968) [33 citations]
- 8 Narita, Norio; Fukui, Akihiko; Kusakabe, Nobuhiko; Watanabe, Noriharu; *et al.* (incl. **de Leon, J. P.**), 2019, *MuSCAT2: four-color simultaneous camera for the 1.52-m Telescopio Carlos Sánchez*, Journal of Astronomical Telescopes, Instruments, and Systems, **5**, 15001 (arXiv:1807.01908) [128 citations]
- 7 Mayama, Satoshi; Akiyama, Eiji; Panić, Olja; Miley, James; *et al.* (incl. **de Leon, J. P.**), 2018, *ALMA Reveals a Misaligned Inner Gas Disk inside the Large Cavity of a Transitional Disk*, The Astrophysical Journal, **868** (arXiv:1810.06941) [38 citations]
- 6 Takami, Michihiro; Fu, Guangwei; Liu, Hauyu Baobab; Karr, Jennifer L.; *et al.* (incl. **de Leon,**

- J. P.**), 2018, *Near-infrared High-resolution Imaging Polarimetry of FU Ori-type Objects: Toward a Unified Scheme for Low-mass Protostellar Evolution*, The Astrophysical Journal, **864**, 20 (arXiv:1807.03499) [49 citations]
- 5 Livingston, John H.; Endl, Michael; Dai, Fei; Cochran, William D.; *et al.* (incl. **de Leon, J. P.**), 2018, *44 Validated Planets from K2 Campaign 10*, The Astronomical Journal, **156**, 78 (arXiv:1806.11504) [63 citations]
 - 4 Uyama, Taichi; Hashimoto, Jun; Muto, Takayuki; Akiyama, Eiji; *et al.* (incl. **de Leon, J. P.**), 2018, *Subaru/HiCIAO HK_s Imaging of LKHa 330: Multi-band Detection of the Gap and Spiral-like Structures*, The Astronomical Journal, **156**, 63 (arXiv:1804.05934) [28 citations]
 - 3 Murakami, Kenichi; Hayakawa, Tomohiko; **de Leon, J. P.**; & Ishikawa, Masatoshi, 2018, *Real-time high-speed motion blur compensation method using galvanometer mirror for shape sensing of microfabricated objects*, Proceedings Volume 10679, Optics, Photonics, and Digital Technologies for Imaging Applications V [7 citations]
 - 2 Yang, Yi; Hashimoto, Jun; Hayashi, Saeko S.; Tamura, Motohide; *et al.* (incl. **de Leon, J. P.**), 2017, *Near-infrared Imaging Polarimetry of Inner Region of GG Tau A Disk*, The Astronomical Journal, **153**, 7 (arXiv:1610.09134) [14 citations]
 - 1 **de Leon, J. P.**; Takami, Michihiro; Karr, Jennifer L.; Hashimoto, Jun; *et al.*, 2015, *Near-IR High-resolution Imaging Polarimetry of the SU Aur Disk: Clues for Tidal Tails?*, The Astrophysical Journal, **806** (arXiv:1505.03610) [17 citations]

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: Ministry of Education, Culture, Sports (MEXT) PhD Scholarship (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 from the 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: Received multiple travel grants to attend workshops in the US and Taiwan related to data science, and participated in research-related conferences and observation runs in the U.S., Europe, South Africa, and South-east Asia

Teaching and Mentorships

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

Research Collaborations: Collaborated with M. Mori (Current postdoc) on the discovery and validation of a rare planet in the Neptune desert (Refer to [Mori et al. 2022](#)).

Pipeline Development: Wrote a public Python code for easily analyzing data from TESS telescope appropriate for research and instruction (Refer to github.com/jpdeleon/quicklook)

Thesis Advisory: Worked with H. Kobayashi (Former undergraduate student) to develop a

pipeline for finding young transiting planets and binary stars in nearby star clusters (Refer to github.com/hiremasa/ytps). Also advised A. Nodado (Former student) on her undergraduate thesis focused on Mira variables.

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

Trainings and Workshops

<https://sites.google.com/g.ecc.u-tokyo.ac.jp/young-transiting-planet-worksh/home>, Ishigaki, Japan, Mar 12 - 15, 2025

<https://indico.narit.or.th/event/203/>, 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, California, 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, 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 Particle 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

2018-present: bi-monthly observations with MuSCAT2/TCS telescope, Teide Observatory, Tenerife, Spain (remote)

2022-2023: monthly remote observations with 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 the Philippine Astronomy Week 2024 led by PAGASA, Feb 2024

Featured at Pinoy Scientists in [Jan 2023](#)

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

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

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

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

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

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

Invited speaker at Philippine Rural High School, Los Banos, Apr 2014

Invited speaker at St. Joseph's Academy Sariaya High School, Apr 2013

Affiliations and Services

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

SPACETIDE Foundation ([spacetide.org](#); 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)