

# Tuan Do

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## CONTACT INFORMATION

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## RESEARCH INTERESTS

Milky Way structure, Galactic center, nuclear star clusters, stellar dynamics, star formation, stellar evolution, AGN variability, high angular resolution imaging

## EDUCATION

**University of California, Los Angeles**, Los Angeles, CA USA

Ph.D., Astronomy, 2010

- Thesis Title: Physical processes in the vicinity of a supermassive black hole
- Advisor: Professor Andrea Ghez

M.S., Astronomy, 2006

- Thesis Topic: Reconstructing the mass loss history of pre-planetary nebulae with Spitzer
- Advisor: Professor Mark Morris

**University of California, Berkeley**, Berkeley, CA USA

B.A., Physics and Astrophysics, 2004

## ACADEMIC APPOINTMENTS

**University of California, Los Angeles**, Los Angeles, CA, USA

*Associate Professor*

**2024 to present**

*Assistant Professor*

**2020 to 2024**

*Associate Research Scientist*

**2017 to 2020**

*Assistant Research Scientist*

**2014 to 2017**

**Dunlap Institute for Astronomy and Astrophysics**, University of Toronto, ON, Canada

*Dunlap Fellow*

**August 2012 to November 2014**

**University of California, Irvine**, Irvine, CA, USA

*TMT Postdoctoral Fellow*

**September 2010 to July 2012**

**University of California, Los Angeles**, Los Angeles, CA, USA

*Graduate Research Assistant*

**2004 to 2010**

**University of Arizona**, Tuscon, AZ, USA

*Research for Undergraduates Program*

**June to August 2003**

University of California, Berkeley, Berkeley, CA, USA

*Undergraduate researcher*

**June 2001 to May 2003**

TEACHING AND  
PUBLIC  
OUTREACH

University of California, Los Angeles, Los Angeles, CA, USA

- Astro 278 - AI for Astrophysics - graduate course on applications of artificial intelligence to Astrophysics, **Fall 2024**
- Physics 180M, 170M - Machine Learning for Physical Sciences Lab - upper division undergraduate lab course on big data and applications of machine learning to problems in the physical sciences, **Winter 2022, Winter 2023, Winter 2024, Winter 2025**
- Astro 180 - Astrophysics Laboratory - upper division undergraduate course on observational astrophysics, **Fall 2021, Fall 2022, Fall 2023, Spring 2024, Spring 2025, Fall 2025**
- Astro 278 - Machine Learning for Physical Sciences Lab - graduate course on machine learning in the physical sciences, 25 students, **Winter 2021**
- Astro 3 - Nature of the Universe - lower division course on an introduction to astronomy, 130 students, **Fall 2020**
- Astro 115 - Statistical Mechanics and Astrophysics - upper division course on statistical mechanics and applications in astrophysics, 31 students, **Winter 2016**

University of Toronto, Toronto, ON, Canada

- Teacher outreach committee - outreach to science teachers in local schools (2013 - 2014)
- Laboratory instructor and local organizing committee, Dunlap Instrumentation Summer School (2013, 2014)
- Summer Undergraduate Research Program (SURP), organizing committee member (2013, 2014)
- Lead designer and instructor for SURP short course (2013, 2014)
- Education and Public Outreach Committee member (2012 - 2014)

University of California, Los Angeles, Los Angeles, CA, USA

*Teaching Assistant*

- Astro 5 - Life in the universe **Fall 2008**
- Astro 6 - Cosmology **Winter 2005**
- Astro 3 - Nature of the universe **Fall 2004**

UCLA planetarium and telescopes coordinator **2005-2007**

Center for Adaptive Optics, Santa Cruz, CA, USA

*Laboratory Instructor*

**August 2006, 2007, 2008, & 2009**

- Part of a team that developed and taught the laboratory portion of the Adaptive Optics Summer School, a week long course designed to familiarize graduate students and post-docs with the theory and applications of adaptive topics.

REFEREED  
PUBLICATIONS

[ADS link to refereed publications](#)

1. Hosek M. W., Do T., Martinez G. D., Lewis-Merrill R., Ghez A. M., Lu J. R., Sakai S., Anderson J., “*The HST–Gaia Near-infrared Astrometric Reference Frame Near the Milky Way Galactic Center*”, 2025, ApJ, 989, 79
2. Campbell C., Boscoe B., Do T., “*AquiLLM: a RAG Tool for Capturing Tacit Knowledge in Research Groups*”, 2025, arXiv e-prints, arXiv:2508.05648
3. Bai Z., Cardoso V., Chen Y., Do T., Hees A., Xiao H., Xue X., “*Probing Axions via Spectroscopic Measurements of S-stars at the Galactic Center*”, 2025, arXiv e-prints, arXiv:2507.07482
4. Lam N., Shapley A. E., Sanders R. L., Do T., Jones T., Coil A., Kriek M., Mobasher B., Reddy N. A., Siana B., Clarke L., “*MOSDEF-3D: Keck/OSIRIS Maps of the Ionized ISM in  $z \sim 2$  Galaxies*”, 2025, arXiv e-prints, arXiv:2506.22547
5. von Fellenberg S. D., Roychowdhury T., Michail J. M., Summers Z., Sanger-Johnson G., Fazio G. G., Haggard D., Hora J. L., Philippov A., Ripperda B., Smith H. A., Willner S. P., Witzel G., Zhang S., Becklin E. E., Bower G. C., Chandra S., Do T., Garcia Marin M., Gurwell M. A., Ford N. M., Hada K., Markoff S., Morris M. R., Neilsen J., Sabha N. B., Seefeldt-Gail B., “*First Mid-infrared Detection and Modeling of a Flare from Sgr A\**”, 2025, ApJL, 979, L20
6. Pagnat H., Do T., Gautam A. K., Martinez G. D., Ghez A. M., Sakai S., Weldon G. C., Hosek M. W., Haggard Z., O’Neil K. K., Becklin E. E., Witzel G., Lu J. R., Matthews K., “*New Evidence for a Flux-independent Spectral Index of Sgr A\* in the Near-infrared*”, 2024, ApJ, 977, 228
7. Lizarraga A., Hanchen Jiang E., Nowack J., Li Y. Q., Nian Wu Y., Boscoe B., Do T., “*Understanding Galaxy Morphology Evolution Through Cosmic Time via Redshift Conditioned Diffusion Models*”, 2024, arXiv e-prints, arXiv:2411.18440
8. Soriano J., Saikrishnan S., Seenivasan V., Boscoe B., Singal J., Do T., “*Using different sources of ground truths and transfer learning to improve the generalization of photometric redshift estimation*”, 2024, arXiv e-prints, arXiv:2411.18054
9. Jones E., Do T., Li Y. Q., Alfaro K., Singal J., Boscoe B., “*Redshift Prediction with Images for Cosmology Using a Bayesian Convolutional Neural Network with Conformal Predictions*”, 2024, ApJ, 974, 159
10. Haggard Z., Ghez A. M., Sakai S., Gautam A. K., Do T., Lu J. R., Hosek M., Morris M. R., Granados S., “*The Galactic Center in Color: Measuring Extinction with High-proper-motion Stars*”, 2024, AJ, 168, 166
11. Gallego-Cano E., Fritz T., Schoedel R., Feldmeier-Krause A., Do T., Nishiyama S., “*Photometric classification of stars around the Milky Way’s central black hole: I. Central parsec*”, 2024, AAP, 689, A190
12. von Fellenberg S. D., Witzel G., Bauboeck M., Chung H.-H., Marchili N., Martinez G., Sadun-Bordoni M., Bourdarot G., Do T., Drescher A., Fazio G., Eisenhauer F., Genzel R., Gillessen S., Hora J. L., Mang F., Ott T., Smith H. A., Ros E., Ribeiro D. C., Widmann F., Willner S. P., Anton Zensus J., “*General relativistic effects and the near-infrared variability of Sgr A\*. II. A systematic approach to temporal*

*asymmetry*”, 2024, AAP, 688, L12

13. Li Y. Q., Do T., Jones E., Boscoe B., Alfaro K., Nguyen Z., “*Using Galaxy Evolution as Source of Physics-Based Ground Truth for Generative Models*”, 2024, arXiv e-prints, arXiv:2407.07229
14. Do O C. R., Sappey B., Konopacky Q. M., Ruffio J.-B., O’Neil K. K., Do T., Martinez G., Barman T. S., Nguyen J. S., Xuan J. W., Theissen C. A., Blunt S., Thompson W., Hsu C.-C., Baker A., Bartos R., Blake G. A., Calvin B., Centre S., Delorme J.-R., Doppmann G., Echeverri D., Finnerty L., Fitzgerald M. P., Inglis J., Jovanovic N., Lopez R. A., Mawet D., Morris E., Pezzato J., Schofield T., Skemer A., Wallace J. K., Wang J. J., Wang J., Liberman J., “*Orbital and Atmospheric Characterization of the 1RXS J034231.8+121622 System using High-resolution Spectroscopy Confirms that the Companion is a Low-mass Star*”, 2024, AJ, 167, 278
15. Gautam A. K., Do T., Ghez A. M., Chu D. S., Hosek M. W., Sakai S., Naoz S., Morris M. R., Ciurlo A., Haggard Z., Lu J. R., “*An Estimate of the Binary Star Fraction among Young Stars at the Galactic Center: Possible Evidence of a Radial Dependence*”, 2024, ApJ, 964, 164
16. Jones E., Do T., Boscoe B., Singal J., Wan Y., Nguyen Z., “*Improving Photometric Redshift Estimation for Cosmology with LSST Using Bayesian Neural Networks*”, 2024, ApJ, 964, 130
17. Gautam A. K., Do T., Ghez A. M., Chu D. S., Hosek M. W., Sakai S., Naoz S., Morris M. R., Ciurlo A., Haggard Z., Lu J. R., “*An Estimate of the Binary Star Fraction among Young Stars at the Galactic Center: Possible Evidence of a Radial Dependence*”, 2024, ApJ, 964, 164
18. Dinh C. K., Ciurlo A., Morris M. R., Schoedel R., Ghez A., Do T., “*High-resolution, Mid-infrared Color Temperature Mapping of the Central 10<sup>2</sup> of the Galaxy*”, 2024, AJ, 167, 41
19. Will C. M., Naoz S., Hees A., Tucker A., Zhang E., Do T., Ghez A., “*Constraining a Companion of the Galactic Center Black Hole Sgr A<sup>\*</sup>*”, 2023, ApJ, 959, 58
20. Weldon G. C., Do T., Witzel G., Ghez A. M., Gautam A. K., Becklin E. E., Morris M. R., Martinez G. D., Sakai S., Lu J. R., Matthews K., Hosek M. W., Haggard Z., “*Near-infrared Flux Distribution of Sgr A<sup>\*</sup> from 2005-2022: Evidence for an Enhanced Accretion Episode in 2019*”, 2023, ApJL, 954, L33
21. Do O C. R., O’Neil K. K., Konopacky Q. M., Do T., Martinez G. D., Ruffio J.-B., Ghez A. M., “*The Orbital Eccentricities of Directly Imaged Companions Using Observable-based Priors: Implications for Population-level Distributions*”, 2023, AJ, 166, 48
22. Jones E., Do T., Boscoe B., Singal J., Wan Y., Nguyen Z., “*Photometric Redshifts for Cosmology: Improving Accuracy and Uncertainty Estimates Using Bayesian Neural Networks*”, 2023, arXiv e-prints, arXiv:2306.13179
23. Chu D. S., Do T., Ghez A., Gautam A. K., Ciurlo A., O’neil K. K., Hosek M.

- W., Hees A., Naoz S., Sakai S., Lu J. R., Chen Z., Bentley R. O., Becklin E. E., Matthews K., “*Evidence of a Decreased Binary Fraction for Massive Stars within 20 milliparsecs of the Supermassive Black Hole at the Galactic Center*”, 2023, ApJ, 948, 94
24. Jia S., Xu N., Lu J. R., Chu D. S., O’Neil K. K., Drechsler W. B., Hosek M. W., Sakai S., Do T., Ciurlo A., Gautam A. K., Ghez A. M., Becklin E., Morris M. R., Bentley R. O., “*Stellar Populations in the Central 0.5 pc of Our Galaxy. III. The Dynamical Substructures*”, 2023, ApJ, 949, 18
25. Schoedel R., Nogueras-Lara F., Hosek M., Do T., Lu J., Martinez Arranz A., Ghez A., Rich R. M., Gardini A., Gallego-Cano E., Cano Gonzalez M., Gallego-Calvente A. T., “*The formation history of our Galaxy’s nuclear stellar disc constrained from HST observations of the Quintuplet field*”, 2023, AAP, 672, L8
26. Ciurlo A., Campbell R. D., Morris M. R., Do T., Ghez A. M., Becklin E. E., Bentley R. O., Chu D. S., Gautam A. K., Gursahani Y. A., Hees A., O’Neil K. K., Lu J. R., Martinez G. D., Naoz S., Sakai S., Schoedel R., “*The Swansong of the Galactic Center Source X7: An Extreme Example of Tidal Evolution near the Supermassive Black Hole*”, 2023, ApJ, 944, 136
27. Chen Z., Do T., Ghez A. M., Hosek M. W., Feldmeier-Krause A., Chu D. S., Bentley R. O., Lu J. R., Morris M. R., “*The Star Formation History of the Milky Way’s Nuclear Star Cluster*”, 2023, ApJ, 944, 79
28. Terry S. K., Lu J. R., Turri P., Ciurlo A., Gautam A., Do T., Fitzgerald M. P., Ghez A., Hosek M., Witzel G., “*AIROPA IV: Validating point spread function reconstruction on various science cases*”, 2023, Journal of Astronomical Telescopes, Instruments, and Systems, 9, 018003
29. Hosek M. W., Do T., Lu J. R., Morris M. R., Ghez A. M., Martinez G. D., Anderson J., “*Measuring the Orbits of the Arches and Quintuplet Clusters Using HST and Gaia: Exploring Scenarios for Star Formation near the Galactic Center*”, 2022, ApJ, 939, 68
30. Boscoe B., Do T., Jones E., Li Y., Alfaro K., Ma C., “*Elements of effective machine learning datasets in astronomy*”, 2022, arXiv e-prints, arXiv:2211.14401
31. Paumard T., Ciurlo A., Morris M. R., Do T., Ghez A. M., “*Regularized 3D spectroscopy with CubeFit: Method and application to the Galactic Center circumnuclear disk*”, 2022, AAP, 664, A97
32. Turri P., Lu J. R., Witzel G., Ciurlo A., Do T., Ghez A. M., Fitzgerald M. P., Britton M. C., Ragland S., Terry S. K., “*AIROPA III: testing simulated and on-sky data*”, 2022, Journal of Astronomical Telescopes, Instruments, and Systems, 8, 039002
33. Shields J. V., Kerzendorf W., Hosek M. W., Shen K. J., Rest A., Do T., Lu J. R., Fullard A. G., Strampelli G., Zenteno A., “*Searching for a Hypervelocity White Dwarf SN Ia Companion: A Proper-motion Survey of SN 1006*”, 2022, ApJL, 933, L31

34. Boyce H., Haggard D., Witzel G., Fellenberg S. von ., Willner S. P., Becklin E. E., Do T., Eckart A., Fazio G. G., Gurwell M. A., Hora J. L., Markoff S., Morris M. R., Neilsen J., Nowak M., Smith H. A., Zhang S., “*Multiwavelength Variability of Sagittarius A\* in 2019 July*”, 2022, ApJ, 931, 7
35. Ramey E., Lu J. R., Yin R., Robinson S., Wizinowich P., Ragland S., Lyke J., Jia S., Sakai S., Gautam A., Do T., Hosek M., Ghez A., Morris M. R., Becklin E., Matthews K., “*Analyzing long-term performance of the Keck-II adaptive optics system*”, 2022, Journal of Astronomical Telescopes, Instruments, and Systems, 8, 028004
36. Paumard T., Ciurlo A., Morris M. R., Do T., Ghez A. M., “*Regularized 3D spectroscopy with CubeFit: method and application to the Galactic Center Circumnuclear disk*”, 2022, arXiv e-prints, arXiv:2204.11539
37. Singal J., Silverman G., Jones E., Do T., Boscoe B., Wan Y., “*Machine Learning Classification to Identify Catastrophic Outlier Photometric Redshift Estimates*”, 2022, ApJ, 928, 6
38. Cosens M., Wright S. A., Murray N., Armus L., Sandstrom K., Do T., Larson K., Martinez G., Sabhlok S., Vayner A., Wiley J., “*Kinematics and Feedback in H II regions in the Dwarf Starburst Galaxy IC 10*”, 2022, arXiv e-prints, arXiv:2202.04098
39. Bentley R. O., Do T., Kerzendorf W., Chu D. S., Chen Z., Konopacky Q., Ghez A., “*Measuring the  $\alpha$ -abundance of Subsolar-metallicity Stars in the Milky Way’s Central Half-parsec: Testing Globular Cluster and Dwarf Galaxy Infall Scenarios*”, 2022, ApJ, 925, 77
40. Jones E., Do T., Boscoe B., Wan Y., Nguyen Z., Singal J., “*Photometric Redshifts for Cosmology: Improving Accuracy and Uncertainty Estimates Using Bayesian Neural Networks*”, 2021, Neurips Physical Sciences Workshop
41. Chatterjee K., Markoff S., Neilsen J., Younsi Z., Witzel G., Tchekhovskoy A., Yoon D., Ingram A., van der Klis M., Boyce H., Do T., Haggard D., Nowak M. A., “*General relativistic MHD simulations of non-thermal flaring in Sagittarius A\**”, 2021, MNRAS, 507, 5281
42. Witzel G., Martinez G., Willner S. P., Becklin E. E., Boyce H., Do T., Eckart A., Fazio G. G., Ghez A., Gurwell M. A., Haggard D., Herrero-Illana R., Hora J. L., Li Z., Liu J., Marchili N., Morris M. R., Smith H. A., Subroweit M., Zensus J. A., “*Rapid Variability of Sgr A\* across the Electromagnetic Spectrum*”, 2021, ApJ, 917, 73
43. Lu W., Fuller J., Raveh Y., Perets H. B., Li T. S., Hosek M. W., Do T., “*The former companion of hyper-velocity star S5-HVS1*”, 2021, MNRAS, 503, 603
44. Ciurlo A., Morris M. R., Campbell R. D., Ghez A. M., Do T., Chu D. S., “*Upper Limit on Brackett- $\gamma$  Emission from the Immediate Accretion Flow onto the Galactic Black Hole*”, 2021, ApJ, 910, 143
45. Rose S. C., Naoz S., Gautam A. K., Ghez A. M., Do T., Chu D., Becklin E., “*On Socially Distant Neighbors: Using Binaries to Constrain the Density of Objects in*

*the Galactic Center*”, 2020, ApJ, 904, 113

46. Do T., David Martinez G., Kerzendorf W., Feldmeier-Krause A., Arca Sedda M., Neumayer N., Gualandris A., “*Revealing the Formation of the Milky Way Nuclear Star Cluster via Chemo-dynamical Modeling*”, 2020, ApJL, 901, L28
47. Arca Sedda M., Gualandris A., Do T., Feldmeier-Krause A., Neumayer N., Erkal D., “*On the Origin of a Rotating Metal-poor Stellar Population in the Milky Way Nuclear Cluster*”, 2020, ApJL, 901, L29
48. Lu W., Fuller J., Raveh Y., Perets H. B., Li T. S., Hosek M. W., Do T., “*The former companion of the hyper-velocity star S5-HVS1*”, 2020, arXiv e-prints, arXiv:2005.12300
49. Zhu Z., Li Z., Ciurlo A., Morris M. R., Zhang M., Do T., Ghez A. M., “*Galactic Center IRS 13E: Colliding Stellar Winds or an Intermediate-mass Black Hole?*”, 2020, ApJ, 897, 135
50. Feldmeier-Krause A., Kerzendorf W., Do T., Nogueras-Lara F., Neumayer N., Walcher C. J., Seth A., Schoedel R., de Zeeuw P. T., Hilker M., Lutzgendorf N., Kuntschner H., Kissler-Patig M., “*Asymmetric spatial distribution of subsolar metallicity stars in the Milky Way nuclear star cluster*”, 2020, MNRAS, 494, 396
51. Hees A., Do T., Roberts B. M., Ghez A. M., Nishiyama S., Bentley R. O., Gautam A. K., Jia S., Kara T., Lu J. R., Saida H., Sakai S., Takahashi M., Takamori Y., “*Search for a Variation of the Fine Structure Constant around the Supermassive Black Hole in Our Galactic Center*”, 2020, Phys. Rev. Letters, 124, 081101
52. Ciurlo A., Campbell R. D., Morris M. R., Do T., Ghez A. M., Hees A., Sitarski B. N., Kosmo O’Neil K., Chu D. S., Martinez G. D., Naoz S., Stephan A. P., “*A population of dust-enshrouded objects orbiting the Galactic black hole*”, 2020, Nature, 577, 337
53. Naoz S., Will C. M., Ramirez-Ruiz E., Hees A., Ghez A. M., Do T., “*A Hidden Friend for the Galactic Center Black Hole, Sgr A\**”, 2020, ApJL, 888, L8
54. Li C.-J., Kerzendorf W. E., Chu Y.-H., Chen T.-W., Do T., Gruendl R. A., Holmes A., Ishioka R., Leibundgut B., Pan K.-C., Ricker P. M., Weisz D., “*Search for Surviving Companions of Progenitors of Young LMC SN Ia Remnants*”, 2019, ApJ, 886, 99
55. Chen Z., Gallego-Cano E., Do T., Witzel G., Ghez A. M., Schoedel R., Sitarski B. N., Becklin E. E., Lu J., Morris M. R., Dehghanfar A., Gautam A. K., Hees A., Hosek M. W., Jia S., Mangian A. C., Matthews K., “*Consistency of the Infrared Variability of SGR A\* over 22 yr*”, 2019, ApJL, 882, L28
56. **Do T.**, Witzel G., Gautam A. K., Chen Z., Ghez A. M., Morris M. R., Becklin E. E., Ciurlo A., Hosek M., Martinez G. D., Matthews K., Sakai S., Schoedel R., “*Unprecedented Near-infrared Brightness and Variability of Sgr A\**”, 2019, ApJL, 882, L27
57. **Do T.**, Hees A., Ghez A., Martinez G. D., Chu D. S., Jia S., Sakai S., Lu J. R., Gautam A. K., O’Neil K. K., Becklin E. E., Morris M. R., Matthews K., Nishiyama

- S., Campbell R., Chappell S., Chen Z., Ciurlo A., Dehghanfar A., Gallego-Cano E., Kerzendorf W. E., Lyke J. E., Naoz S., Saida H., Schoedel R., Takahashi M., Takamori Y., Witzel G., Wizinowich P., “*Relativistic redshift of the star S0-2 orbiting the Galactic Center supermassive black hole*”, 2019, *Science*, 365, 664
58. Hees A., Dehghanfar A., Do T., Ghez A. M., Martinez G. D., Campbell R., Lu J. R., “*An Adaptive Scheduling Tool to Optimize Measurements to Reach a Scientific Objective: Methodology and Application to Measurements of Stellar Orbits in the Galactic Center*”, 2019, *ApJ*, 880, 87
59. O’Neil K. K., Martinez G. D., Hees A., Ghez A. M., Do T., Witzel G., Konopacky Q., Becklin E. E., Chu D. S., Lu J. R., Matthews K., Sakai S., “*Improving Orbit Estimates for Incomplete Orbits with a New Approach to Priors: with Applications from Black Holes to Planets*”, 2019, *AJ*, 158, 4
60. Stephan A. P., Naoz S., Ghez A. M., Morris M. R., Ciurlo A., Do T., Breivik K., Coughlin S., Rodriguez C. L., “*The Fate of Binaries in the Galactic Center: The Mundane and the Exotic*”, 2019, *ApJ*, 878, 58
61. Sakai S., Lu J. R., Ghez A., Jia S., Do T., Witzel G., Gautam A. K., Hees A., Becklin E., Matthews K., Hosek M. W., “*The Galactic Center: An Improved Astrometric Reference Frame for Stellar Orbits around the Supermassive Black Hole*”, 2019, *ApJ*, 873, 65
62. Jia S., Lu J. R., Sakai S., Gautam A. K., Do T., Hosek M. W., Service M., Ghez A. M., Gallego-Cano E., Schoedel R., Hees A., Morris M. R., Becklin E., Matthews K., “*The Galactic Center: Improved Relative Astrometry for Velocities, Accelerations, and Orbits near the Supermassive Black Hole*”, 2019, *ApJ*, 873, 9
63. Kerzendorf W. E., Do T., de Mink S. E., Goetberg Y., Milisavljevic D., Zapartas E., Renzo M., Justham S., Podsiadlowski P., Fesen R. A., “*No surviving non-compact stellar companion to Cassiopeia A*”, 2019, *AAP*, 623, A34
64. Lockhart K. E., Do T., Larkin J. E., Boehle A., Campbell R. D., Chappell S., Chu D., Ciurlo A., Cosens M., Fitzgerald M. P., Ghez A., Lu J. R., Lyke J. E., Mieda E., Rudy A. R., Vayner A., Walth G., Wright S. A., “*Characterizing and Improving the Data Reduction Pipeline for the Keck OSIRIS Integral Field Spectrograph*”, 2019, *AJ*, 157, 75
65. Gautam A. K., Do T., Ghez A. M., Morris M. R., Martinez G. D., Hosek M. W., Lu J. R., Sakai S., Witzel G., Jia S., Becklin E. E., Matthews K., “*An Adaptive Optics Survey of Stellar Variability at the Galactic Center*”, 2019, *ApJ*, 871, 103
66. Cosens M., Wright S. A., Mieda E., Murray N., Armus L., Do T., Larkin J. E., Larson K., Martinez G., Walth G., Vayner A., “*Size-Luminosity Scaling Relations of Local and Distant Star-forming Regions*”, 2018, *ApJ*, 869, 11
67. Kerzendorf W. E., Long K. S., Winkler P. F., Do T., “*Tycho-B: an unlikely companion for SN 1572\**”, 2018, *MNRAS*, 479, 5696
68. Kerzendorf W. E., Strampelli G., Shen K. J., Schwab J., Pakmor R., Do T., Buchner J., Rest A., “*A search for a surviving companion in SN 1006*”, 2018, *MNRAS*, 479,

69. Witzel G., Martinez G., Hora J., Willner S. P., Morris M. R., Gammie C., Becklin E. E., Ashby M. L. N., Baganoff F., Carey S., Do T., Fazio G. G., Ghez A., Glaccum W. J., Haggard D., Herrero-Illana R., Ingalls J., Narayan R., Smith H. A., “*Variability Timescale and Spectral Index of Sgr A\* in the Near Infrared: Approximate Bayesian Computation Analysis of the Variability of the Closest Supermassive Black Hole*”, 2018, ApJ, 863, 15
70. Do T., Kerzendorf W., Konopacky Q., Marcinek J. M., Ghez A., Lu J. R., Morris M. R., “*Super-solar Metallicity Stars in the Galactic Center Nuclear Star Cluster: Unusual Sc, V, and Y Abundances*”, 2018, ApJL, 855, L5
71. Hosek M. W., Lu J. R., Anderson J., Do T., Schlafly E. F., Ghez A. M., Clarkson W. I., Morris M. R., Albers S. M., “*The Optical/Near-infrared Extinction Law in Highly Reddened Regions*”, 2018, ApJ, 855, 13
72. Chu D. S., Do T., Hees A., Ghez A., Naoz S., Witzel G., Sakai S., Chappell S., Gautam A. K., Lu J. R., Matthews K., “*Investigating the Binarity of S0-2: Implications for Its Origins and Robustness as a Probe of the Laws of Gravity around a Supermassive Black Hole*”, 2018, ApJ, 854, 12
73. Naoz S., Ghez A. M., Hees A., Do T., Witzel G., Lu J. R., “*Confusing Binaries: The Role of Stellar Binaries in Biasing Disk Properties in the Galactic Center*”, 2018, ApJL, 853, L24
74. Hosek M. W., Lu J. R., Anderson J., Do T., Schlafly E. F., Ghez A. M., Clarkson W. I., Morris M. R., Albers S. M., “*The Optical/Near-infrared Extinction Law in Highly Reddened Regions*”, 2018, ApJ, 855, 13
75. Dong H., Schoedel R., Williams B. F., Noguera-Lara F., Gallego-Cano E., Gallego-Calvente T., Wang Q. D., Rich R. M., Morris M. R., **Do T.**, Ghez A., “*Near-infrared variability study of the central  $2.3 \times 2.3$  arcmin<sup>2</sup> of the Galactic Centre - II. Identification of RR Lyrae stars in the Milky Way nuclear star cluster*”, 2017, MNRAS, 471, 3617
76. Dong H., Schoedel R., Williams B. F., Noguera-Lara F., Gallego-Cano E., Gallego-Calvente T., Wang Q. D., Morris M. R., **Do T.**, Ghez A., “*Near-infrared variability study of the central  $2.3$  arcmin  $\times$   $2.3$  arcmin of the Galactic Centre - I. Catalogue of variable sources*”, 2017, MNRAS, 470, 3427
77. Witzel G., Sitarski B. N., Ghez A. M., Morris M. R., Hees A., **Do T.**, Lu J. R., Naoz S., Boehle A., Martinez G., Chappell S., Schoedel R., Meyer L., Yelda S., Becklin E. E., Matthews K., “*The Post-periapsis Evolution of Galactic Center Source G1: The Second Case of a Resolved Tidal Interaction with a Supermassive Black Hole*”, 2017, ApJ, 847, 80
78. Hees A., **Do T.**, Ghez A. M., Martinez G. D., Naoz S., Becklin E. E., Boehle A., Chappell S., Chu D., Dehghanfar A., Kosmo K., Lu J. R., Matthews K., Morris M. R., Sakai S., Schoedel R., Witzel G., “*Testing General Relativity with Stellar Orbits around the Supermassive Black Hole in Our Galactic Center*”, 2017, Physical Review Letters, 118, 211101

79. Feldmeier-Krause A., Kerzendorf W., Neumayer N., Schoedel R., Nogueras-Lara F., **Do T.**, de Zeeuw P. T., Kuntschner H., “*KMOS view of the Galactic Centre II. Metallicity distribution of late-type stars*”, 2017, MNRAS, 464, 194
80. B. N. Sitarski, G. Witzel, A. M. Ghez, M. R. Morris, **T. Do**, J. R. Lu, S. Naoz, A. Boehle, G. Martinez, S. Chappell, R. Schoedel, L. Meyer, S. Yelda, E. E. Becklin, K. Matthews, “*The post-periapse evolution of galactic center source G1: the second case of a resolved tidal interaction with a supermassive black hole*”, 2017, ApJ, 847, 80W
81. A. Boehle, A. M. Ghez, R. Schoedel, L. Meyer, S. Yelda, S. Albers, G. D. Martinez, E. E. Becklin, **T. Do**, J. R. Lu, K. Matthews, M. R. Morris, B. Sitarski, G. Witzel, “*An Improved Distance and Mass Estimate for Sgr A\* from a Multi-Star Orbit Analysis*”, 2016, ApJ, 830, 17B
82. Vayner A., Wright S. A., **Do T.**, Larkin J. E., Armus L., Gallagher S. C., “*Providing Stringent Star Formation Rate Limits of  $z \sim 2$  QSO Host Galaxies at High Angular Resolution*”, 2016, ApJ, 821, 64
83. Stephan A. P., Naoz S., Ghez A. M., Witzel G., Sitarski B. N., **Do T.**, Kocsis B., “*Merging Binaries in the Galactic Center: The eccentric Kozai-Lidov mechanism with stellar evolution*”, 2016, MNRAS, 460, 3494
84. Skidmore W., TMT International Science Development Teams, Science Advisory Committee, “*Thirty Meter Telescope Detailed Science Case: 2015*”, 2015, Research in Astronomy and Astrophysics, 15, 1945
85. **Do T.**, Kerzendorf W., Winsor N., Stostad M., Morris M. R., Lu J. R., Ghez A. M., “*Discovery of Low-metallicity Stars in the Central Parsec of the Milky Way*”, 2015, ApJ, 809, 143
86. Stostad M., **Do T.**, Murray N., Lu J. R., Yelda S., Ghez A., “*Mapping the Outer Edge of the Young Stellar Cluster in the Galactic Center*”, 2015, ApJ, 808, 106
87. Witzel G., Ghez A. M., Morris M. R., Sitarski B. N., Boehle A., Naoz S., Campbell R., Becklin E. E., Canalizo G., Chappell S., **Do T.**, Lu J. R., Matthews K., Meyer L., Stockton A., Wizinowich P., Yelda S., “*Detection of Galactic Center Source G2 at  $3.8 \mu\text{m}$  during Periapse Passage*”, 2014, ApJL, 796, L8
88. **Do T.**, Wright S. A., Barth A. J., Barton E. J., Simard L., Larkin J. E., Moore A. M., Wang L., Ellerbroek B., “*Prospects for Measuring Supermassive Black Hole Masses with Future Extremely Large Telescopes*”, 2014, AJ, 147, 93
89. Mieda E., Wright S. A., Larkin J. E., Graham J. R., Adkins S. M., Lyke J. E., Campbell R. D., Maire J., **Do T.**, Gordon J., “*Efficiency Measurements and Installation of a New Grating for the OSIRIS Spectrograph at Keck Observatory*”, 2014, PASP, 126, 250
90. Yelda S., Ghez A. M., Lu J. R., **Do T.**, Meyer L., Morris M. R., Matthews K., “*Properties of the Remnant Clockwise Disk of Young Stars in the Galactic Center*”, 2014, ApJ, 783, 131

91. Kerzendorf W. E., Childress M., Scharwächter J., **Do T.**, Schmidt B. P., “*A Reconnaissance of the Possible Donor Stars to the Kepler Supernova*”, 2014, ApJ, 782, 27
92. **Do, T.**, Martinez, G. D., Yelda, S., Ghez, A. M., Bullock, J., Kaplinghat, M., Lu, J. R., Peter, A. G. H., Phifer, K., “*Three-dimensional stellar kinematics at the Galactic center: measuring the nuclear star cluster spatial density profile, black hole mass, and distance*”, 2013, ApJL, 779, L6
93. Phifer, K., **Do, T.**, Meyer, L., Ghez, A. M., Witzel, G., Yelda, S., Boehle, A., Lu, J. R., Morris, M. R., Becklin, E. E., and Matthews, K., “*Keck Observations of the Galactic Center Source G2: Gas Cloud or Star?*”, 2013, ApJL, 773, L13
94. Lu, J. R., **Do, T.**, Ghez, A. M., Morris, M. R., Yelda, S., and Matthews, K., “*Stellar Populations in the Central 0.5 pc of the Galaxy. II. The Initial Mass Function*”, 2013, ApJ, 764, 155
95. **Do, T.**, Lu, J. R., Ghez, A. M., Morris, M. R., Yelda, S., Martinez, G. D., Wright, S. A., and Matthews, K., “*Stellar Populations in the Central 0.5 pc of the Galaxy. I. A New Method for Constructing Luminosity Functions and Surface-density Profiles*”, 2013, ApJ, 764, 154
96. Meyer, L., Ghez, A. M., Schödel, R., Yelda, S., Boehle, A., Lu, J. R., **Do, T.**, Morris, M. R., Becklin, E. E., and Matthews, K., “*The Shortest-Known-Period Star Orbiting Our Galaxy’s Supermassive Black Hole*”, 2012, Science, 338, 84
97. Clarkson, W. I., Ghez, A. M., Morris, M. R., Lu, J. R., Stolte, A., McCrady, N., **Do, T.**, Yelda, S., “*Proper Motions of the Arches Cluster with Keck Laser Guide Star Adaptive Optics: The First Kinematic Mass Measurement of the Arches*”, 2012, ApJ, 751, 132
98. Yelda, S.; Lu, J. R.; Ghez, A. M.; Clarkson, W.; Anderson, J.; **Do, T.**; Matthews, K., “*Improving Galactic Center Astrometry by Reducing the Effects of Geometric Distortion*”, 2010, ApJ, 725, 331
99. Stolte, A.; Morris, M. R.; Ghez, A. M.; **Do, T.**; Lu, J. R.; Ballard, C.; Mills, E.; Matthews, K., “*Disks in the Arches cluster – survival in a starburst environment*”, 2010, ApJ, 718, 810
100. **Do, T.**; Ghez, A. M.; Morris, M. R.; Lu, J. R.; Matthews, K.; Yelda, S.; Larkin, J., 2009, “*High angular resolution integral-field spectroscopy of the Galaxy’s nuclear cluster: a missing stellar cusp?*”, ApJ, 703, 1323
101. Meyer, L.; **Do, T.**; Ghez, A.; Morris, M. R.; Yelda, S.; Schoedel, R.; Eckart, A.; “*A power-law break in the near-infrared power spectrum of the Galactic center black hole*”, 2009, ApJL, 694, 1
102. **Do, T.**; Ghez, A. M.; Morris, M. R.; Yelda, S.; Meyer, L.; Lu, J. R.; Hornstein, S. D.; Matthews, K.; “*A Near-Infrared Variability Study of the Galactic Black Hole: A Red Noise Source with No Detected Periodicity*”, 2009, ApJ, 691, 1021
103. Ghez, A. M.; Salim, S.; Weinberg, N. N.; Lu, J. R.; **Do, T.**; Dunn, J. K.; Matthews,

K.; Morris, M. R.; Yelda, S.; Becklin, E. E.; Kremenek, T.; Milosavljevic, M.; Naiman, J.; “*Measuring Distance and Properties of the Milky Way’s Central Supermassive Black Hole with Stellar Orbits*”, 2008, ApJ, 689, 1044

104. Meyer, L.; **Do, T.**; Ghez, A.; Morris, M. R.; Witzel, G.; Eckart, A.; Belanger, G.; Schodel, R.; “*A 600 Minute Near-Infrared Light Curve of Sagittarius A\**”, 2008, ApJL, 688, 17

105. **Do, T.**; Morris, M. R.; Sahai, R.; Stapelfeldt, K.; “*A Spitzer Study of the Mass-Loss Histories of Three Bipolar Preplanetary Nebulae*”, 2007, AJ, 134, 1417

106. Morris M., Uchida K., Do T., “*A magnetic torsional wave near the Galactic Centre traced by a ‘double helix’ nebula*”, 2006, Nature, 440, 308

## MENTORSHIP

### Postdocs

- 2025 - present - Lingfeng Wei
- 2025 - present - Rory Bentley\*
- 2020 - 2025 - Devin Chu\*
- 2020 - 2021 - Bernadette (Bernie) Boscoe, current: Assistant Professor at Southern Oregon University
- 2018 - present - Matthew Hosek\*

\* Co-Advised with Prof. Andrea Ghez

### Graduate Students

- 2025 - current - Morgan Himes
- 2025 - current - Kalvyn Adams
- 2023 - current - Jonathan Soriano
- 2022 - 2024 - Inbal Mizarhi
- 2022 - 2024 - Hadrien Pagnat\*
- 2021 - 2023 - Grant Weldon\*
- 2020 - current - Rebecca Lewis-Merrill
- 2018 - 2023 - Kelly Kosmo O’Neil\*
- 2017 - 2024 - Evan Jones
- 2017 - 2025 - Rory Bentley\*
- 2016 - 2022 - Zhuo Chen\*
- 2015 - 2020 - Devin Chu\*
- 2015 - 2020 - Abhimat Gautam\*

## Undergraduate Students

- 2025 - current - Samiksha Krishnamurthy
- 2025 - current - Andy Pham
- 2025 - Annika Feng
- 2024 - 2025 - Minseo Lee
- 2024 - current - Swathya Chauhan
- 2024 - current - Jacob Nowack
- 2024 - current - Srinath Saikrishnan
- 2024 - current - Vikram Seenivasan
- 2023 - 2024 - Hang Min
- 2022 - 2024 - William Chang
- 2022 - 2024 - Yun Qi (Billy) Li
- 2022 - 2024 - Christy (Chris) Ma
- 2022 - 2024 - Kevin Alfaro
- 2022 - Nissia Indradjaja
- 2021 - 2022 - Yujie Wan
- 2021 - 2022 - Zooey Nguyen
- 2018 - 2020 - Ethan Cochran
- 2018 - 2020 - Shizhe (Alex) Chen
- 2017 - Joseph Marcinik
- 2017 - 2018 - Daniel Katz
- 2016 - Ryan Boyden
- 2014 - 2016 - Nathan Winsor
- 2013 - 2015 - Morten Stostad

## AWARDS AND HONORS

2022 - UCLA Physics and Astronomy Department Teaching Award  
2022 - Hellman Fellow  
2022 - Andrea M. Ghez Centennial Term Chair in Astronomy and Astrophysics  
2021 - UCLA Physics and Astronomy Department Teaching Award  
2014 - Kavli Fellow  
2012 - Dunlap Fellowship, Dunlap Institute, University of Toronto  
2010 - Dissertation Year Fellowship, UCLA