Dr. Rocio Kiman

Citizenship: Argentinian and Spanish
Email: rociokiman@gmail.com
Website: rkiman.github.io
ORCID: 0000-0003-2102-3159

University of California, Santa Barbara
Broida Hall
Santa Barbara, California 93106
Last updated: September 2025

Appointments

Postdoctoral Scholar 2025–Present
University of California, Santa Barbara, California, USA.

Sherman Fairchild Postdoctoral Scholar 2022–2025
Research Associate in Astronomy
California Institute of Technology, Pasadena, California, USA.

Postdoctoral Scholar 2021–2022
Kavli Institute for Theoretical Physics, University of California, Santa Barbara
Santa Barbara, California, USA.

Education

The Graduate Center, City University of New York 2016–2021
Ph.D. in Physics
Thesis Title: "A Unified Approach to M Dwarf Ages"
Thesis Advisors: Dr. Jacqueline K. Faherty & Dr. Kelle Cruz
New York, New York, USA.

Universidad de Buenos Aires 2011–2016
Licenciatura in Physics
Thesis Title: "Higgs boson pair production at the LHC"
Thesis Advisor: Prof. Daniel de Florian
Buenos Aires, Argentina.

Grants & Awards

JWST Cycle 4 General Observer time (co-I, PI: J. Faherty)	2025
JWST Cycle 3 General Observer time (co-I, PI: A. Schneider)	2024
Chandra Cycle 25 General Observer Program (co-I, PI: C. Garraffo)	2023
TESS Cycle 5 Guest Investigator Program, for $\$70,000$	2022
Burke Fellowship, California Institute of Technology	2021
Humboldt Research Fellowship for Postdoctoral Researchers (declined)	2021
PSC-CUNY Cycle 51 Trad B Research Award, (PI: K.Cruz) for \$6000	2020
Sigma Xi Grants in Aid of Research, for \$4334	2019
Doctoral Student Research Grant (Round 14) for \$875	2019
Provost's Pre-Dissertation Research Fellowship for the Sciences, for \$5000	2019
K2 Guest Observer Cycle 6 (PI: J. Faherty) for $\$125,000$	2018
PSC-CUNY Cycle 49 Trad B Research Award (PI: K.Cruz) for \$6000.00	2018
CUNY Science Scholarship, City University of New York	2016
CONICET Doctoral Fellowship, University of Buenos Aires	2016

First or Second Author Publications

6. The Diversity of Cold Worlds: Age and Characterization of the COCONUTS-2 T9 Brown Dwarf.
Kiman, R.; Beichman, C.H.; Ruiz Diaz, A.; Faherty, J.K.; Lacy, B.; Suárez, G.; Copeland, J.; Kirkpatrick, J.D.; Marocco, F.; Rowland, M.J.; Gagné, J.; Bardalez Gagliuffi, D.C.; Vos, J.M.; Schneider, A.C.; Whiteford, N.; Smart, R.; Costa, E.; Mendez, R.A.; Submitted.

5. On Convective Turnover Times and Dynamos In Low-Mass Stars.
Gossage, S.; **Kiman, R.**; Monsch, K.; Medina, A.A.; Drake, J.J.; Garraffo, C.; Lu, Y.; Wing, J.D.; Wright, N.J; The Astrophysical Journal, 988, 1, 18 (2025) DOI: 0.3847/1538-4357/adde4d, citations: 5

4. Accurate and Model Independent Radius Determination of Single FGK and M Dwarfs Using Gaia DR3 Data.
Kiman, R.; Brandt, T.D.; Faherty, J.K.; Popinchalk, M.; The Astronomical Journal, 168, 3, 15 (2024) DOI: 10.3847/1538-3881/ad5cf3, citations: 7

3. `wdwarfdate`: A Python Package to Derive Bayesian Ages of White Dwarfs.
Kiman, R.,; Xu, S.; Faherty, J.K.; Gagné, J., Angus, R.; Brandt, T.D.; Casewell, S.L., Cruz, K.L.; The Astronomical Journal, 164, 2, 13 (2022) DOI: 10.3847/1538-3881/ac7788, citations: 26

2. Calibration of the Hα Age-Activity relation for M dwarfs
Kiman, R.; Faherty, J.K.; Cruz, K.L.; Gagné, J.; Angus, R.; Schmidt, S. J.; Mann, A.W.; Bardalez Gagliuffi, D.C.; Rice, E.; The Astronomical Journal, 161, 6, 22 (2021) DOI: 10.3847/1538-3881/abf561, citations: 50

1. Exploring the age dependent properties of M and L dwarfs using *Gaia* and SDSS.
Kiman, R., Schmidt, S.J., Angus, R., Cruz, K.L., Faherty, J.K. & Rice, E., The Astronomical Journal, 157, 6, 231 (2019) DOI: 10.3847/1538-3881/ab1753, citations: 69

Co-author Publications

26. Discovery of the Second Y+Y Dwarf Binary System: CWISEP J193518.59-154620.3
De Furio, M.; Faherty, J.K.; Bardalez Gagliuffi, D.C.; Gagné, J.; Gonzales, E.C.; **Kiman, R.**; Kuchner, M.; Marocco, F.; Alejandro Merchan, S.; Rowland, M.; Schneider, A.C.; Suárez, G.; Vos, J.M.; The Astrophysical Journal Letters, 990, 2, 8, (2025) DOI: 10.3847/2041-8213/adfee1

25. Diversity of Cold Worlds: A Near-complete Spectral Energy Distribution for 2MASS J04151954 - 0935066 Using JWST
Alejandro Merchan, S.; Faherty, J.K.; Suárez, G.; Cruz, K.L.; Burgasser, A.J.; Gagné, J.; Hood, C.E.; Gonzales, E.C.; Bardalez Gagliuffi, D.C.; L'Heureux, J.; Vos, J.M.; Schneider, A.C.; Meisner, A.M.; Morley, C.; Kirkpatrick, J.D.; Marocco, F.; **Kiman, R.**; Beichman, C.A.; Burningham, B.; Caselden, D.; Eisenhardt, P.R.; Gelino, C.R.; Gharib-Nezhad, E.; Kuchner, M.J.; Lacy, B.; Rothermich, A.; Rowland, M.J.; Whiteford, N.; The Astrophysical Journal, 989, 1, 10, (2025) DOI: 10.3847/1538-4357/ade3d7

24. Tidally Heated Sub-Neptunes, Refined Planetary Compositions, and Confirmation of a Third Planet in the TOI-1266 System
Greklek-McKeon, M.; Vissapragada, S.; Knutson, H.A.; Fukui, A.; Saidel, M.; Gomez Barrientos, J.; Levine, W.G.; Behmard, A.; Batygin, K.; Chachan, Y.; Vasisht, G.; Hu, R.; Cloutier, R.; Latham, D.; López-Morales, M.; Vanderburg, A.; Heffner, C.; Nied, P.; Milburn, J.; Wilson, I.; Roderick, D.; Koviak, K.; Barlow, T.; Stone, J.F.; **Kiman, R.**; et al. The Astronomical Journal, 169, 6, 28 (2025), DOI:10.3847/1538-3881/adc0fe

23. The Diversity of Cold Worlds: A Blended-light Binary Straddling the T/Y Transition in Brown Dwarfs
Bardalez Gagliuffi, D.C.; Faherty, J.K.; Suárez, G.; Alejandro Merchan, S.; Lacy, B.; Burningham, B.; Matuszewska, K.; **Kiman, R.**; Vos, J.M.; Rothermich, A.; Gagné, J.; Morley, C.; Rowland, M.J.; Caselden, D.; Meisner, A.; Schneider, A.C.; Kuchner, M.J.; Beichman, C.A.; Eisenhardt, P.R.; Gelino, C.R.; Gharib-Nezhad, E.; Gonzales, E.C.; Marocco, F.; Whiteford, N.; Kirkpatrick, J.D.; The Astrophysical Journal, 984, 1, 13 (2025) DOI: 10.3847/1538-4357/adb61e, citations: 1

22. Exploration of a Dissolving Association Made Up of IC 2602, Tucana–Horologium, and Other Young Comoving Groups
Popinchalk, M.; Faherty, J.K.; Gagné, J.; Curtis, J.L.; Moranta, L.; **Kiman, R.**; Couture, D.; Jusino, A.; Paliwal, G.; Mouzakitis, I.; Lamisa, N.; Calderon, M.; Tangney, I.; Lacossade, J., The Astrophysical Journal, 972, 2, 22 (2024), DOI: 10.3847/1538-4357/ad5b56

21. Thirteen New M Dwarf + T Dwarf Pairs Identified with WISE/NEOWISE
Marocco, F.; Kirkpatrick, J.D.; Schneider, A.C.; Meisner, A.M.; Popinchalk, M.; Gelino, C.R.; Faherty, J.K.; Burgasser, A.J.; Caselden, D.; Gagné, J.; Aganze, C.; Bardalez-Gagliuffi, D.C.; Casewell, S.L.; Hsu, C.; **Kiman, R.**; Eisenhardt, P.R.M.; Kuchner, M.J.; Stern, D.; Gramaize, L.; Sainio, A.; Bickle, T.P.; Rothermich, A.; Pendrill, W.; Thévenot, M.; Kabatnik, M.; Colombo, G.; Higashimura, H.; Kiwy, F.; Marchese, E.J.; Stevnbak Andersen, N.; Tanner, C.; Walla, J.; Wedracki, Z.; The Backyard Worlds Collaboration; The Astrophysical Journal, 967, 2, 27 (2024) DOI: 10.3847/1538-4357/ad3f1d, citations 3

20. Methane Emission From a Cool Brown Dwarf
Faherty, J. K.; Burningham, B.; Gagné, J.; Suárez, G.; Vos, J.M.; Merchan, S.A.; Morley, C.V.; Rowland, M.; Lacy, B.; **Kiman, R.**; Caselden, D.; Kirkpatrick, J.D.; Meisner, A.; Schneider, A.C.; Kuchner, M.J.; Bardalez Gagliuffi, D.C.; Beichman, C.; Eisenhardt, P.; Gelino, C.R.; Gharib-Nezhad, E.; Gonzales, E.; Marocco, F.; Rothermich, A.J.; Whiteford, N.; Nature, 628, 8008, 511-514 (2024) DOI: 10.1038/s41586-024-07190-w, citations: 15

19. The Initial Mass Function Based on the Full-sky 20-pc Census of ∼3,600 Stars and Brown Dwarfs
Kirkpatrick, J.D.; Marocco, F.; Gelino, C.R.; Raghu, Y.; Faherty, J.K.; Bardalez Gagliuffi, D.C.; Schurr, S.D.; Apps, K.; Schneider, A.C.; Meisner, A.M.; Kuchner, M.J.; Caselden, D.; Smart, R.L.; Casewell, S.L.; Raddi, R.; Kesseli, A.; Stevnbak Andersen, N.; Antonini, E.; Beaulieu, P.; Bickle, T.P.; Bilsing, M.; Chieng, R.; Colin, G.; Deen, S.; Dereveanco, A.; Doll, K.; Durantini Luca, H.A.; Frazer, A.; Gantier, J.M.; Gramaize, L.; Grant, K.; Hamlet, L.K.; Higashimura, H.; Hyogo, M.; Jałowiczor, P.A.; Jonkeren, A.; Kabatnik, M.; Kiwy, F.; Martin, D.W.; Michaels, M.N.; Pendrill, W.; Pessanha Machado, C.; Pumphrey, B.; Rothermich, A.; Russwurm, R.; Sainio, A.; Sanchez, J.; Sapelkin-Tambling, F.T.; Schümann, J.; Selg-Mann,

K.; Singh, H.; Stenner, A.; Sun, G.; Tanner, C.; Thévenot, M.; Ventura, M.; Voloshin, N.V.; Walla, J.; Wedracki, Z.; Adorno, J.I.; Aganze, C.; Allers, K.N.; Brooks, H.; Burgasser, A.J.; Calamari, E.; Connor, T.; Costa, E.; Eisenhardt, P.R.; Gagné, J.; Gerasimov, R.; Gonzales, E.C.; Hsu, C.; **Kiman, R.**; et al.; The Astrophysical Journal Supplement Series, 271, 2, 93 pp., (2024) DOI: 10.3847/1538-4365/ad24e2, citations: 67

18. High-Precision Atmospheric Constraints for a Cool T Dwarf from JWST Spectroscopy
Hood, C.E.; Mukherjee, S.; Fortney, J.J.; Line, M.R.; Faherty, J.K.; Alejandro Merchan, S. ; Burningham, B.; Suárez, G.; **Kiman, R.**; Gagné, J.; Beichman, C.A.; Vos, J.M.; Bardalez Gagliuffi, D.; Meisner, A.M.; Gonzales, E.C., Submitted to Nature Astronomy, DOI: 10.48550/arXiv.2402.05345, citations: 12

17. A Wolf 359 in Sheep's Clothing: Hunting for Substellar Companions in the Fifth-closest System Using Combined High-contrast Imaging and Radial Velocity Analysis
Bowens-Rubin, R.; Akana Murphy, J.M.; Hinz, P.M.; Limbach, M.A.; Seifahrt, A.; **Kiman, R.**; Salama, M.; Mukherjee, S.; Brady, M.; Carter, A.L.; Jensen-Clem, R.; van Kooten, M.A.M.; Isaacson, H.; Kosiarek, M.; Bean, J.L.; Kasper, D.; Luque, R.; Stefánsson, G.; Stürmer, J.; The Astronomical Journal, 166, 6, 23 (2023) DOI: 10.3847/1538-3881/ad03e5, citations: 8

16. Dynamical masses and ages of Sirius-like systems
Zhang, H.; Brandt, T.D.; **Kiman, R.**; Venner, A.; An, Q.; Chen, M.; Li, Y.; Monthly Notices of the Royal Astronomical Society, 524, 1, 695-715 (2023) DOI: 10.1093/mnras/stad1849, citations: 6

15. Surveying nearby brown dwarfs with HGCA: direct imaging discovery of a faint, high-mass brown dwarf orbiting HD 176535 A
Li, Y.; Brandt, T.D.; Brandt, G.M.; An, Q.; Franson, K.; Dupuy, T.J.; Chen, M.; Bowens-Rubin, R.; Lewis, B.L.; Bowler, B.P.; Gibbs, A.; **Kiman, R.**; Faherty, J.K.; Currie, T.; Jensen-Clem, R.; Zhang, H.; Contreras-Martinez, E.; Fitzgerald, M.P. ; Mazin, B.A.; Millar-Blanchaer, M.; Monthly Notices of the Royal Astronomical Society, 522, 4, 622-5637 (2023) DOI: 10.1093/mnras/stad1315, citations: 15

14. The Oceanus Moving Group: A New 500 Myr Old Host for the Nearest Brown Dwarf
Gagné, J.; Moranta, L.; Faherty, J.K.; **Kiman, R.**; Couture, D.; Larochelle, A.R.; Popinchalk, M.; Morrone, D.; The Astrophysical Journal, 945, 2, 23 (2023) DOI: 10.3847/1538-4357/acb8b7, citations: 16

13. Examining the Rotation Period Distribution of the 40 Myr Tucana-Horologium Association with TESS
Popinchalk, M.; Faherty, J.K.; Curtis, J.L.; Gagné, Jonathan; Bardalez Gagliuffi, D.C.; Vos, J.M.; Ayala, A.; Gonzales, L.; **Kiman, R.**; The Astrophysical Journal, 945, 2, 18 (2023) DOI: 10.3847/1538-4357/acb055, citations: 11

12. Magnetic braking saturates: evidence from the orbital period distribution of low-mass detached eclipsing binaries from ZTF
El-Badry, K.; Conroy, C.; Fuller, J.; **Kiman, R.**; van Roestel, J.; Rodriguez, A.C.; Burdge, K.B.; Monthly Notices of the Royal Astronomical Society, Advance Access (2022) DOI: 10.1093/mnras/stac2945, citations: 39

11. The POKEMON Speckle Survey of Nearby M Dwarfs. I. New Discoveries
Clark, C.A.; van Belle, G.T.; Horch, E.P.; von Braun, K.; Ciardi, D.R.; Winters, J.G.; **Kiman, R.**; The Astronomical Journal, 164, 2, 13 (2022) DOI: 10.3847/1538-3881/ac739c, citations: 13

10. Discovery of 34 Low-mass Comoving Systems Using NOIRLab Source Catalog DR2
Kiwy, F.; Faherty, J.K.; Meisner, A.; Schneider, A.C.; Kirkpatrick, J.D.; Kuchner, M.J.; Burgasser, A.J.; Casewell, S.; **Kiman, R.**; Calamari, E.; Aganze, C.; Hsu, C.; Sainio, A.; Thakur, V.; Backyard Worlds: Planet 9 Collaboration; The Astronomical Journal, 164, 1, 24 (2022) DOI: 10.3847/1538-3881/ac68e7, citations: 7

9. WDJ220838.73+454434.04: a White Dwarf Companion in the AR Lacertae System
Bickle, T.P.; Jalowiczor, P.A.; Casewell, S.L.; Faherty, J.K.; **Kiman, R.**; Schneider, A.C.; Kirkpatrick, J.D.; Meisner, A.M.; Kuchner, M.J.; Caselden, D.; Backyard Worlds: Planet 9 Collaboration; Research Notes of the AAS, 6, 6, 127 (2022). DOI: 10.3847/2515-5172/ac780a, citations: 2

8. Ross 19B: An Extremely Cold Companion Discovered via the Backyard Worlds: Planet 9 Citizen Science Project
Schneider, A.C.; Meisner, A.M.; Gagne, J.; Faherty, J.K.; Marocco, F.; Burgasser, A.J.; Kirkpatrick, J.D.; Kuchner, M.J.; Gramaize, L.; Rothermich, A.; Brooks, H.; Vrba, F.J.; Bardalez Gagliuffi, D.; Caselden, D.; Cushing, M.C.; Gelino, C.R.; Line, M.R.; Casewell, S.L.; Debes, J.H.; Aganze, C.; Ayala, A.; Gerasimov, R.; Gonzales, E.C.; Hau, C.; **Kiman, R.**; Popinchalk, M.; Theissen, C.; The Backyard Worlds; Planet 9 Collaboration; The Astrophysical Journal, 921, 2, 13 (2021) DOI: 10.3847/1538-4357/ac1c75, citations: 16

7. Evaluating Rotation Periods of M Dwarfs across the Ages
Popinchalk, M.; Faherty, J.; **Kiman, R.**; Angus, R.; Curtis, J.; Gagne, J.; Cruz, K.; Rice, E.; The Astrophysical Journal, 916, 2, 77 (2021) DOI: 10.3847/1538-4357/ac0444, citations: 54

6. Gyro-Kinematic Ages for 29,949 Kepler Stars
Lu, Y.; Angus, R.; Curtis, J.L.; David, T.J., **Kiman, R.**; The Astronomical Journal, 161, 4, 189 (2021) DOI: 10.3847/1538-3881/abe4d6, citations: 42

5. The Field Substellar Mass Function Based on the Full-sky 20-pc Census of 525 L, T, and Y Dwarfs.
Kirkpatrick, J.D.; Gelino, C.R.; Faherty, J.K.; Meisner, A.M.; Caselden, D.; Schneider, A.C.; Marocco, F.; Cayago, A.J.; Smart, R.L.; Eisenhardt, P.R.; Kuchner, M.J.; Wright, E.L.; Cushing, M.C.; Allers, K.N.; Bardalez Gagliuffi, D.C.; Burgasser, A.J.; Gagne, J.; Logsdon, S.E.; Martin, E.C.; Ingalls, J.G.; Lowrance, P.J.; Abrahams, E.S.; Aganze, C.; Gerasimov, R.; Gonzales, E.C.; Hsu, C.; Kamraj, N.; **Kiman, R.**; et al, The Astrophysical Journal Supplement Series, 253, 1, 85 (2021) DOI: 10.3847/1538-4365/abd107, citations: 152

4. Discovery of a Nearby Young Brown Dwarf Disk
Schutte, M.C.; Lawson, K. D.; Wisniewski, J.P.; Kuchner, M.J.; Silverberg, S.M.; Faherty, J.K.; Bardalez Gagliuffi, D.C.; **Kiman, R.**; Gagné, J.; Meisner, A.; Schneider, A.C.; Bans, A.S.; Debes, J.H.; Kovacevic, N.; Bosch, M.K.D.; Durantini Luca, H.A.; Holden, J.; Hyogo, M.; The Astronomical Journal, 160, 4, 10 (2020) DOI: 10.3847/1538-3881/abaccd, citations: 7

3. Spitzer Follow-up of Extremely Cold Brown Dwarfs Discovered by the Backyard Worlds: Planet 9 Citizen Science Project.
   Meisner, A. M.; Faherty, J.K.; Kirkpatrick, J.D.; Schneider, A.C.; Caselden, D.; Gagné, J.; Kuchner, M.J.; Burgasser, A.J.; Casewell, S.L.; Debes, J.H.; Artigau, É.; Bardalez Gagliuffi, D.C.; Logsdon, S.E.; **Kiman, R.** et al., The Astrophysical Journal, 899, 2, 123 (2020) DOI:10.3847/1538-4357/aba633, citations 47

2. Exploring the evolution of stellar rotation using Galactic kinematics
   Angus, R.; Beane, A.; Price-Whelan, A.M.; Newton, E.; Curtis, J.L.; Berger, T.; van Saders, J.; **Kiman, R.**; Foreman-Mackey, D.; Lu, Y.; Anderson, L.; Faherty, J.K., The Astronomical Journal, 160, 2 (2020) DOI: 10.3847/1538-3881/ab91b2, citations: 47

1. Toward Precise Stellar Ages: Combining Isochrone Fitting with Empirical Gyrochronology.
   Angus, R., Morton, T.D., Foreman-Mackey, D., van Saders, J., Curtis, J., Kane, S.R., Bedell, M., **Kiman, R.**, Hogg, D.W.; Brewer, J. The Astronomical Journal, 158, 5, 12 (2019) DOI: 10.3847/1538-3881/ab3c53, citations: 119

Open source code and tutorials

`wdwarfdate`: Open source Python code that estimates white dwarf ages. [Source] [Docs]
Modeling 1: Make a quick fit using astropy.modeling tutorial. [Docs]
Modeling 2: Create a User Defined Models using astropy.modeling tutorial. [Docs]

Observing Time Awarded

One night, Near Infrared Spectrometer, Keck II Observatory for the 2025B semester (PI: R. Kiman)
One night, Near Infrared Spectrometer, Keck II Observatory for the 2025A semester (PI: R. Kiman)
Three nights, Double Spectrograph, Palomar Observatory for the 2023A semester (PI: R. Kiman)
Three nights, Double Spectrograph, Palomar Observatory for the 2022B semester (PI: G. Hallinan)

Observing experience

One and a half nights at the Keck II Observatory with Near Infrared Spectrometer	March 2025
Three nights with the Double Spectrograph (DBSP), Palomar Observatory	Spring 2023
Three nights with the Double Spectrograph (DBSP), Palomar Observatory	Fall 2022
FIRE at the Magellan Telescope at Las Campanas Observatory	December 10–13 2019
SpeX at the NASA Infrared Telescope Facility (NASA IRTF)	August 28 2018
CAPSCam at the DuPont Telescope at Carnegie's Las Campanas Observatory	November 30 2017

Teaching Experience

ASTRO 10200 - Laboratory Explorations in Astronomy Hunter College, CUNY, New York, USA	2019–2020
Classical Mechanics, University of Buenos Aires, Argentina	2016
Private Tutor for High-School and Undergraduate Students High-school subjects: Mathematics, Physics, Chemistry and Informatic Undergraduate subjects: Calculus, Algebra, Physics and Chemistry	2009–2015

Research Advising

Undergraduate Students

5. Waly Karim, Physics and Astronomy Major, University of Rochester June 2024–Present
Summer Undergraduate Research Fellowships (SURF) program and research during the year.
Project title: *Searching for Pulsations in Low Mass Stars Using Unsupervised Learning Techniques.*

4. Azul Ruiz Diaz, Physics and Astronomy Major May 2025–June 2025
American Museum of Natural History, Undergraduate Research.
Project title: *Forward modeling of COCONUTS-2b a T9 brown dwarf.*

3. Natali Muniz, Computer Science Major, Rio Hondo College November 2024–May 2025
Caltech Connection program.
Project title: *Spectral Analysis of M Dwarf-White Dwarf Binaries.*

2. Neha Sajia Shahrin, Astrophysics Major, Princeton University June 2024–May 2025
Summer Undergraduate Research Fellowships (SURF) program and Senior thesis.
Project title: *Searching for Pulsation Signals in Low-mass Stars with TESS through Light Curve Analysis.*

1. Khant Nyi Hlaing Computer Science Major, Pasadena City College 2023–2024
Caltech connection program and Summer Undergraduate Research Fellowships (SURF) program.
Project title: *Understanding the Rotational Behaviors of M Dwarfs.*

Press

Kavli Institute for Theoretical Physics Newsletter interview 2022
JWST Explained video with the Santa Barbara Museum of Natural History 2022
City University of New York News interview 2021

Service

Journal Referee, ApJ, AJ 2021–Present
Pizza Lunch Journal Club, California Institute of Technology 2022–2024
Astronomy Seminar Organizer, California Institute of Technology 2023–2024
Astrophysics Seminar Organizer, American Museum of Natural History 2019–2021

Selected Personal Development

Caltech AI/ML Lab for Engineering and Science 1.0 January–February 2024
Five-day certificate program about basic and current machine learning techniques.
Caltech Taste of teaching July–August 2023
Series of 4 mini-workshops on evidence-proven teaching strategies.

Invited Talks

Institute for Theory and Computation (ITC) Luncheon, Harvard University, May 02 2024, *Estimating M dwarf ages using Hα and kinematics.*
Seminar Center for Astrophysics, Harvard University, October 18 2022, *Studying Radius Inflation on Low-Mass Stars Using Gaia DR3.*
Seminar at IPAC/Caltech, October 5 2022, *A Unified Approach to M Dwarf Ages.*
Kavli Institute for Theoretical Physics, Probes of Transport in Stars Program, December 9 2021, *Through the Fully Convective Boundary: An Overview of Low-mass Stars and Brown Dwarfs.* Available online.
Berkeley online short talk, April 22 2021, *Age Relations for Low-Mass Stars.*
Carnegie Observatories online Lunch Talk, March 19 2021, *Age Relations for Low-Mass Stars.*
Center for Astrophysics's Exoplanet Presentation Lounge online, February 23 2021, *Age Relations for Low-Mass Stars.*
Gemini Observatory Seminar, January 10 2020, Hilo, HI, USA. *Age-dating low mass stars using magnetic activity and kinematics.*
Leibniz-Institut für Astrophysik Potsdam (AIP) Seminar, July 2 2019, Potsdam, Germany. *Finding Age Relations for Low Mass Stars Using Magnetic Activity and Kinematics.*
Princeton University Seminar, May 23 2019, NJ, USA. *Finding Age Relations for Low Mass Stars Using Magnetic Activity and Kinematics.*
Invited panelist, AAS 233, 6–10 January, 2019, Seattle, Washington, USA. *An Open Discussion on Software.*

Selected Contributed Presentations

Contributed talk, AAS 245, January 13–16 2025, National Harbor, Maryland, USA, *The Diversity of Cold Worlds: Age and Characterization of the Coconuts-2 T9 Brown Dwarf.*
Contributed plenary talk, Cool Stars 22, June 24–28 2024, San Diego, California, USA, *Studying Radius Inflation on Low-Mass Stars Using Gaia DR3.*
Contributed talk, XVII Latin American Regional International Astronomical Union Meeting, November 27–December 1 2023, Montevideo, Uruguay, *Studying Radius Inflation on Low-Mass Stars Using Gaia DR3.*
Contributed talk, American Astronomical Society Meeting #241, 8-12 January 2023, Seattle, Washington, USA. *Studying Radius Inflation on Low-Mass Stars Using Gaia DR3.*
Fifty Years of the Skumanich Relations, March 08-11 2022, Boulder, Colorado, USA, *A unified approach to M dwarf ages.*
Online Lunch Talk, March 9 2021, University of Washington, Seattle, Washington, USA, *Age Relations for Low-Mass Stars.*
Online Lunch Talk, February 2 2021, Leiden Observatory, Leiden, The Netherlands, *Age Relations for Low-Mass Stars.*
Online Journal club, September 9 2020, Dartmouth College, Hanover, New Hampshire, USA, *Age Relations for Low-Mass Stars.*
Contributed talk, TRAPPIST-1 conference, June 11–14, 2019, Liège, Belgium. *TRAPPIST-1 in the context of M-dwarfs re-defined by Gaia DR2.*
Contributed talk, Big Apple Magnetic Fields Conference, January 24–25, 2019, Center for Computational Astrophysics at the Flatiron Institute, New York, New York, USA, *Finding age relations for low mass stars using magnetic activity and kinematics.*
Contributed talk, Cool Stars, July 30 to August 3, 2018, Boston, USA, *Age Dating Low Mass Stars*

Using Galactic Kinematics.

Outreach Activities

Activities in English

I participated of the Explore Caltech Science Fair. I was in charged of the solar observation with H-alpha telescope. Pasadena, California, USA. September 28 2024.

Participated of the Dark Sky Festival at the Great Basin National Park, Nevada, USA. September 6-7 2024. Included giving a public talk: *Understanding the Milky Way with Gaia*, and two nights of dark sky observing with telescopes.

Public talk, Amateur Astronomers Association of New York City (AAA), *Understanding the Milky Way with Gaia*, February 13 2024, available online.

Solar annular eclipse viewing from Bryce Canyon National Park, Utah, USA. October 14 2023. I participated on an astronomy panel to answer the questions of the public, a night sky observing with telescopes, and a viewing party of the solar annular eclipse for the open public.

Astronomy on Tap talk: *The evolution of the stars.* October 11 2023. Grand Canyon Lodge, North Rim, Arizona, USA.

I helped organize and participated on International Astronomy day at Santa Barbara, together with the Santa Barbara Museum of Natural History and the Astronomical Unit. April 29 2023. Santa Barbara, California, USA.

Participation on Pasadena School Science Fair, solar observation with Hα telescope. April 22 2023. Pasadena, California, USA.

Astronomy on Tap talk: *How old are stars?* February 13 2023. Pasadena, California, USA.

Invited talk about the Lunar Eclipse for the Astronomy Girl Scouts Club, at the Santa Barbara Museum of Natural History, May 13 2022. Santa Barbara, California, USA.

Invited talk at the Graduate Student Research Symposium, October 23 2020. City College of New York, CUNY, New York, New York, USA.

Presentation at Adventures in Science Camps for children in Grades 1–5., January 29 2019. American Museum of Natural History, New York, New York, USA.

Activities in Spanish

Spanish public talk: *Estudiando la Galaxia con Gaia*, November 8 2024. Event "Noche de las Estrellas". Norton Science and Language Academy, San Bernardino, California.

Spanish Online Lecture: *La vida de las estrellas*, April 24 2024. Colegio Nuestra Señora de la Concepción, Concepción Santander, Colombia.

I co-organized a viewing event of the Total Solar Eclipse, 7–8 April 2024. Instituto Tecnológico de Piedras Negras, Piedras Negras, Mexico. During this two day event we organized talks, a night sky observing with telescopes, and the total solar eclipse viewing, with a total of around 2000 participants from the local community. A summary of the event can by found in this link. I also gave a lecture in Spanish: *La vida de las estrellas.*

Spanish Language Stargazing Lecture: *Cuál es la edad de una estrella?* August 18 2023. Caltech, Pasadena, California, USA.

Planetarium presentations: *Explorando el Sistema Solar.* Santa Barbara Museum of Natural History, Sundays during July 2022. Santa Barbara, California, USA.

Public talk at *Viernes Astronómicos: Cuál es la edad de las estrellas?*, September 18 2020, Universidad Nacional Mayor de San Marcos, Lima, Perú, available online.

Participation in the presentation in Spanish, September 24 2019. *Astronomía en Vivo: Historia*

del Universo. American Museum of Natural History, New York, New York, USA. Open public.

Outreach Assistant, 2014–2016. Universidad de Buenos Aires, Argentina

Presenter at the "Physics week" for high-school students, 2014-2015.

Presenter at the "Museum's night", 2014-2015.

Presenter at the Book Fair in Buenos Aires, May 2015.

Monthly outreach talks for high-school students about the career in Physics.