

# ROCIO AYLÉN KIMAN

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<b>Appointments</b>	<b>Postdoctoral Scholar</b> Kavli Institute for Theoretical Physics at the University of California, Santa Barbara	September 2021 – Present
<b>Education</b>	<b>The Graduate Center, City University of New York</b> Ph.D. in Physics Master of Philosophy Physics (June 2, 2020) Thesis Advisors: Prof. Kelle Cruz & Prof. Jackie Faherty	2016 – 2021
	<b>Universidad de Buenos Aires</b> Licenciatura in Physics Thesis Title: “Higgs boson pair production at the LHC” Thesis Advisor: Prof. Daniel de Florian	2011 – 2016
<b>Grants &amp; Awards</b>	PSC-CUNY Cycle 51 Trad B Research Award, (PI: K.Cruz) for \$6000 Sigma Xi Grants in Aid of Research, for \$4334 Doctoral Student Research Grant (Round 14) for \$875 Provosts Pre-Dissertation Research Fellowship for the Sciences, for \$5000 K2 Guest Observer Cycle 6 (PI: J. Faherty) for \$125,000 PSC-CUNY Cycle 49 Trad B Research Award (PI: K.Cruz) for \$6000.00 CUNY Science Scholarship AY 20162017: \$26,000 stipend and full tuition AY 20172018, AY 20182019, AY 20192020 and AY 20202021: full tuition CONICET Doctoral Fellowship, \$5270 stipend	April 16 2020 June 01 2019 March 13 2019 March 08 2019 June 25 2018 April 13 2018 August 25 2016        April 01 – August 24 2016
<b>Open source code and tutorials</b>	<b>wdwarfdate</b> : Open source code that estimates ages of white dwarfs in a Bayesian framework. <a href="#">[Source]</a> <a href="#">[Docs]</a> <b>Modeling 1: Make a quick fit using astropy.modeling</b> Astropy Python Package tutorial. <a href="#">[Docs]</a> <b>Modeling 2: Create a User Defined Models using astropy.modeling</b> Astropy Python Package tutorial. <a href="#">[Docs]</a>	
<b>Invited Talks</b>	<i>Age-dating low mass stars using magnetic activity and kinematics.</i> Seminar, January 10 2020, Gemini Observatory, Hilo, HI, USA. <i>Finding Age Relations for Low Mass Stars Using Magnetic Activity and Kinematics.</i> Seminar, July 2, 2019, Leibniz-Institut für Astrophysik Potsdam (AIP), Potsdam, Germany. <i>Finding Age Relations for Low Mass Stars Using Magnetic Activity and Kinematics.</i> Seminar, May 23, 2019, Princeton University, NJ, USA. <i>An Open Discussion on Software.</i> Invited panelist, AAS 233, 6–10 January, 2019, Seattle, Washington, USA	
<b>Contributed Presentations</b>	<i>Age-Activity relation for M dwarfs using H<math>\alpha</math> equivalent widths</i> Kiman R., Faherty J., Cruz K., Xu S., Schmidt S., Angus R., Gagné J., Bardalez Gagliuffi D., Rice E., Poster presentation,	

AAS 235, 4-8 January, 2020, Honolulu, HI, USA.  
*TRAPPIST-1 in the context of M-dwarfs re-defined by Gaia DR2*. Contributed talk, TRAPPIST-1 conference, June 11–14, 2019, Liège, Belgium.  
*Finding age relations for low mass stars using magnetic activity and kinematics*. Contributed talk, Big Apple Magnetic Fields Conference, January 24–25, 2019, Center for Computational Astrophysics at the Flatiron Institute, NY, New York, USA.  
*Finding age relations for low mass stars using magnetic activity and kinematics*. Kiman, R., Schmidt, S.J., Angus, R., Cruz, K.L., Faherty, J.K. & Rice, E., Poster presentation, AAS 233, 6–10 January, 2019, Seattle, Washington, USA.  
*Age Dating Low Mass Stars Using Galactic Kinematics*. Kiman, R., Schmidt, S.J., Angus, R., Cruz, K.L., Faherty, J.K. & Rice, E., Poster presentation, Cool Stars, July 30 to August 3, 2018, Boston-Cambridge, USA.  
*Age Dating Low Mass Stars Using Galactic Kinematics*. Contributed talk, Cool Stars, July 30 to August 3, 2018, Boston-Cambridge, USA.  
*Age Dating Low Mass Stars Using Galactic Kinematics*. Contributed talk, Graduate Research Conference, May 10, 2018, College of Staten Island, NY, USA.  
*Age Dating Low Mass Stars Using Galactic Kinematics*. Kiman, R., Cruz, K.L., Angus, R., Schmidt, S.J. & Faherty, J.K., Poster presentation, AAS 231, 8–12 January, 2018, Washington DC, USA.  
*Gaia-Cupid: Age-dating low mass stars using galactic kinematics*. Kiman, R., Cruz, K.L., Angus, R., Schmidt, S.J. & Faherty, J.K., Poster presentation, BDExoCon II, 26–27 October 2017, Delaware, USA.  
*Gaia-Cupid: Age-dating low mass stars using galactic kinematics*. Lightning Talk, SDSS-IV Collaboration Meeting, 24–26 July 2017, Santiago, Chile.  
*Photolysis of caged compounds with controlled temporal modulation*. Kiman, R., Camino, P., Ponce Dawson, S., Lopez, L., Piegari, S., Poster Presentation, 99 RNF-AFA (National Meeting of the Physical Association Argentina) 22–25 September, 2014, Buenos Aires, Argentina.

**Conferences  
Attended**

AAS 235. 4–8 January, 2020, Honolulu, HI, USA.  
BDExoCon III. 21–22 October, 2019, Newark, DE, USA.  
TRAPPIST-1 conference. June 11–14, 2019, Liège, Belgium.  
AAS 233. 6–10 January, 2019, Seattle, Washington, USA.  
Astronomy X. 24–27 September 2018, Baltimore MD, USA.  
Cool Stars. July 30 to August 3, 2018, Boston-Cambridge, USA.  
Gaia Sprint. 4–8 to June, 2018, Center for Computational Astrophysics at the Flatiron Institute, NY, New York, USA.  
Python in Astronomy. April 30 to May 4, 2018, Center for Computational Astrophysics at the Flatiron Institute, NY, New York, USA.  
Gaia DR2 Sprint. 25–27 April, 2018, Center for Computational Astrophysics at the Flatiron Institute, NY, New York, USA.  
AAS 231. 8–12 January, 2018, Washington DC, USA.  
BDExoCon II. 26–27 October 2017, Newark, DE, USA.  
SDSS-IV Collaboration Meeting. 24–26 July 2017, Santiago, Chile.

**Schools  
Attended**

Space Astrometry For Astrophysics. 3–7 June 2019, L'Aquila, Italy  
IYAS on the scientific exploration of the Gaia data. February 26 to March 2, 2018, Paris, France.  
La Serena School of Data Science. 21-29 August, 2017, La Serena, Chile.

**Teaching  
Experience**

ASTRO 10200 - Laboratory Explorations in Astronomy	2019 – 2020
Hunter College, CUNY, New York, USA	
Classical Mechanics, University of Buenos Aires, Argentina	2016
Private Tutor for High-School and Undergraduate Students	2009 – 2015

High-school subjects: Mathematics, Physics, Chemistry and Informatic  
Undergraduate subjects: Calculus, Algebra, Physics and Chemistry

<b>Outreach Activities</b>	Invited talk at the Graduate Student Research Symposium.	October 23 2020
	City College of New York, CUNY.	
	Public talk at <i>Viernes Astronómicos: Cuál es la edad de las estrellas?</i>	September 18 2020
	Universidad Nacional Mayor de San Marcos, Lima, Perú. Open public.	
	Available <a href="#">online</a> .	
	Participation in the presentation in Spanish	September 24 2019
	<i>Astronomía en Vivo: Historia del Universo</i>	
	American Museum of Natural History, New York, USA. Open public.	
	Presentation at Adventures in Science Camps	January 29 2019
	American Museum of Natural History, New York, USA.	
<b>Observing experience</b>	For children in Grades 1–5.	
	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.	
<b>First Author Publications</b>	Monthly outreach talks for high-school students about the career in Physics.	
	FIRE at the Magellan Telescope at Las Campanas Observatory	December 10 – 13 2019
	in Chile. For the Backyard worlds project.	
	SpeX at the NASA Infrared Telescope Facility (NASA IRTF)	August 28 2018
<b>Co-author Publications</b>	Telescope at the Mauna Kea Observatory in Hawaii. Remote Observing.	
	CAPSCam at the DuPont Telescope	November 30 2017
<b>First Author Publications</b>	at Carnegie’s Las Campanas Observatory in Chile. Remote Observing.	
	<a href="#">Calibration of the H<math>\alpha</math> Age-Activity relation for M dwarfs</a>	
	<b>Kiman, R.</b> ; 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	
	<a href="#">Exploring the age dependent properties of M and L dwarfs using <i>Gaia</i> and SDSS.</a>	
	<b>Kiman, R.</b> , 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	
	<a href="#">Ross 19B: An Extremely Cold Companion Discovered via the Backyard Worlds: Planet 9 Citizen Science Project</a>	
	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. ; <b>Kiman, R.</b> ; Popinchalk, M. ; Theissen, C. ; The Backyard Worlds; Planet 9 Collaboration; arXiv:2108.05321	
	<a href="#">Evaluating Rotation Periods of M dwarfs</a>	
	Popinchalk, M.; Faherty, J.; <b>Kiman, R.</b> ; Angus, R.; Curtis, J.; Gagne, J.; Cruz, K.; Rice, E.; The Astrophysical Journal, 916, 2, 77 (2021) DOI: 10.3847/1538-4357/ac0444	
	<a href="#">Gyro-Kinematic Ages for 29,949 Kepler Stars</a>	
	Lu, Y.; Angus, R.; Curtis, J.L.; David, T.J., <b>Kiman, R.</b> ; The Astronomical Journal, 161, 4, 189 (2021) DOI: 10.3847/1538-3881/abe4d6	

[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

[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.**; Gagn, 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., (2020) arXiv:2007.15735

[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.; Gagn, J.; Kuchner, M.J.; Burgasser, A.J.; Casewell, S.L.; Debes, J.H.; Artigau, .; Bardalez Gagliuffi, D.C.; Logsdon, S.E.; **Kiman, R.** et al., The Astrophysical Journal, Volume 899, Issue 2, id.123 (2020) DOI:10.3847/1538-4357/aba633

[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, Volume 160, Number 2 (2020) DOI: 10.3847/1538-3881/ab91b2

[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, Volume 158, Issue 5, article id. 173, 12 pp. (2019). DOI: 10.3847/1538-3881/ab3c53

**Non-refereed  
Publications**

**wdwarfdate:** *A python package to estimate white dwarfs ages in a Bayesian framework.*  
**Kiman, R.**; Xu, S.; Faherty, J.K.; Angus, R.; Casewell, S.L.; Gagné, J.; Cruz, K.L.; in prep.