

# ROCIO AYLÉN KIMAN

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The Graduate Center, CUNY  
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<b>Education</b>	The Graduate Center, CUNY, USA	August 25 2016 – Expected Spring 2021
	Ph.D. in Physics Master of Philosophy Physics (June 2, 2020) Thesis Advisors: Prof. Kelle Cruz & Prof. Jackie Faherty	
	Universidad de Buenos Aires, Argentina	March 1 2011 – March 31 2016
	Licenciatura in Physics Thesis Title: “Higgs boson pair production at the LHC” Thesis Advisor: Prof. Daniel de Florian	
<b>Appointments</b>	Non-Teaching Adjunct Hunter College, CUNY	August 2020 – Present
	Graduate Research Assistant Research Foundation, CUNY	August 2017 – Present
	Graduate Assistant A Hunter College, CUNY	August 2019 – August 2020
	Non-Teaching Adjunct Hunter College, CUNY	August 2017 – August 2019
	Non-Teaching Adjunct Graduate Center, CUNY	August 2016 – August 2017
	Teaching Assistant Universidad de Buenos Aires, Argentina Teaching assistant for Classical Mechanics classes.	March 2016 – August 2016
<b>Grants &amp; Awards</b>	PSC-CUNY Cycle 51 Trad B Research Award, (PI: K.Cruz) for \$6000	April 16 2020
	Sigma Xi Grants in Aid of Research, for \$4334	June 01 2019
	Doctoral Student Research Grant (Round 14) for \$875	March 13 2019
	Provosts Pre-Dissertation Research Fellowship for the Sciences, for \$5000	March 08 2019
	K2 Guest Observer Cycle 6 (PI: J. Faherty) for \$125,000	June 25 2018
	PSC-CUNY Cycle 49 Trad B Research Award (PI: K.Cruz) for \$6000.00	April 13 2018
	CUNY Science Scholarship	August 25 2016
	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 01 – August 24 2016
<b>Publications</b>	<b>First author</b>  <i>Calibration of the H<math>\alpha</math> Age-Activity relation for M dwarfs</i> <b>Kimán, R.</b> ; Faherty, J.K.; Cruz, K.L.; Gagné, J.; Angus, R.; Schmidt, S. J.; Mann, A.W.; Bardalez Gagliuffi, D.C.; Rice, E.; Submitted to ApJ on August 14 2020.	

*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

### Co-author

*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, accepted for publication in the Astrophysical Journal Supplement Series (2020) arXiv:2011.11616

*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

*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

*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.

*Evaluating Rotation Periods of M dwarfs*

Popinchalk, M.; Faherty, J.; **Kiman, R.**; Angus, R.; Curtis, J.; Gagne, J.; Cruz, K.; Rice, E., in prep.

*Gyro-Kinematic Ages for 29,949 Kepler Stars*

Lu, Y.; Angus, R.; Curtis, J.L.; David, T.J., **Kiman, R.**, submitted.

### Open source code and tutorials

**wdwarfdate**: Open source code that estimates ages of white dwarfs in a Bayesian framework. [\[Source\]](#) [\[Docs\]](#)

Modeling 1: Make a quick fit using astropy.modeling Astropy Python Package tutorial. [\[Docs\]](#)

Modeling 2: Create a User Defined Models using astropy.modeling Astropy Python Package tutorial. [\[Docs\]](#)

<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 <math>H\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.
	<i>TRAPPIST-1 in the context of M-dwarfs re-defined by Gaia DR2.</i> Contributed talk, TRAPPIST-1 conference, June 11–14, 2019, Liège, Belgium.
	<i>Finding age relations for low mass stars using magnetic activity and kinematics.</i> Contributed talk, Big Apple Magnetic Fields Conference, January 24–25, 2019, Center for Computational Astrophysics at the Flatiron Institute, NY, New York, USA.
	<i>Finding age relations for low mass stars using magnetic activity and kinematics.</i> 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.
	<i>Age Dating Low Mass Stars Using Galactic Kinematics.</i> 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.
	<i>Age Dating Low Mass Stars Using Galactic Kinematics.</i> Contributed talk, Cool Stars, July 30 to August 3, 2018, Boston-Cambridge, USA.
	<i>Age Dating Low Mass Stars Using Galactic Kinematics.</i> Contributed talk, Graduate Research Conference, May 10, 2018, College of Staten Island, NY, USA.
	<i>Age Dating Low Mass Stars Using Galactic Kinematics.</i> Kiman, R., Cruz, K.L., Angus, R., Schmidt, S.J. & Faherty, J.K., Poster presentation, AAS 231, 8–12 January, 2018, Washington DC, USA.
	<i>Gaia-Cupid: Age-dating low mass stars using galactic kinematics.</i> Kiman, R., Cruz, K.L., Angus, R., Schmidt, S.J. & Faherty, J.K., Poster presentation, BDExoCon II, 26–27 October 2017, Delaware, USA.
	<i>Gaia-Cupid: Age-dating low mass stars using galactic kinematics.</i> Lightning Talk, SDSS-IV Collaboration Meeting, 24–26 July 2017, Santiago, Chile.
<b>Conferences Attended</b>	<i>Photolysis of caged compounds with controlled temporal modulation.</i> 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.
	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 January 27 – May 28 2020  
Hunter College, CUNY, New York, USA

ASTRO 10200 - Laboratory Explorations in Astronomy August 26 – December 12 2019  
Hunter College, CUNY, New York, USA

Classical Mechanics March 1 – June 30 2016  
University of Buenos Aires, Argentina

Private Tutor March 01 2009 – December 25 2015  
for High-School and Undergraduate Students  
High-school subjects: Mathematics, Physics, Chemistry and Informatic  
Undergraduate subjects: Calculus, Algebra, Physics and Chemistry

**Outreach  
Activities**

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

Public talk at *Viernes Astronómico: Cuál es la edad de las estrellas?* September 18 2020  
Universidad Nacional Mayor de San Marcos, Lima, Perú. Open public.  
Available [online](#).

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

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

**Observing  
experience**

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  
Telescope at the Mauna Kea Observatory in Hawaii. Remote Observing.

CAPSCam at the DuPont Telescope November 30 2017  
at Carnegie’s Las Campanas Observatory in Chile. Remote Observing.