

# CURRICULUM VITAE

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## EDUCATION

2014 – 2018 Ph.D. Astronomy,  
Department of Astronomy (DAS),  
Universidad de Chile.  
2009 - 2013 Bachelor of Science in Astronomy,  
Facultad de Ciencias Matemáticas y Físicas  
Universidad de Chile.

## APPOINTMENTS

- Postdoc Scholar, Astronomy Department, University of California Berkeley (2018-present)

## FIELD EXPERIENCE

- Main programming language Python. Experience with IDL, C and R.
- Knowledge in astronomical software (e.g. IRAF, SExtractor, SWarp, SCAMP and PSFEx.)
- Experience in spectroscopic and imaging observation (21 nights).
- Knowledge of Machine Learning tools for astronomy (e.g. *scikit-learn* and *astroML*)
- Knowledge level user databases SQL and influxDB.
- Knowledge level user of HPC Systems.
- Teaching assistant of Astroinformatic, General Astronomy, and Stellar Astrophysics courses (5 semesters).

## FELLOWSHIPS

2014 – 2018 CONICYT scholarship.

## PUBLICATIONS

- **Martínez-Palomera, J.**; Förster, F.; Protopapas, P.; ...; “*The High Cadence Transient Survey (HITS): Compilation and characterization of light-curve catalogs*”; 2018, AJ, 156, 186.

- **Martínez-Palomera, J.**; Lira, P.; ...; “*Introducing the Search for Intermediate-mass Black-hole In Nearby Galaxy (SIBLING) Survey*”; 2018, submitted to AAS.
- Carrasco Davis, R; Cabrera-Vives, G;... **Martínez-Palomera, Jorge**; Donoso, Cristobal: “*Deep Learning for Image Sequence Classification of Astronomical Events*”; 2018, accepted by PASP
- Medina, G.; Muñoz, R.;... **Martínez, J.**;... San Martín, J.; “*Discovery of distant RR Lyrae stars in the Milky Way using DECam*”; 2017, ApJ in press.
- Peña, J.; Fuentes, C.;... **Martínez, J.**; ... Hamuy, M.; “*The High Cadence Transient Survey (HITS): Asteroids*”; 2017, ApJ in press.
- Förster, F.; Moriya, T.J.;... **Martínez, J.**;... Walton, N.A.; Young, D.R.; “*The delay of shock breakout due to circumstellar material evident in most type II supernovae*”; 2018, NatAs, 122.
- Medina, G.; Muñoz, R.;... **Martínez, J.**;... San Martín, J.; “*Serendipitous Discovery of RR Lyrae Stars in the Leo V Ultra-faint Galaxy*”; 2017, ApJ, 845, 10.
- Lira, P.; Botti, I.;... **Martínez, J.**; López, P.; “*Reverberation mapping of luminous quasars at high-z*”; 2018, ApJ, 865, 56 .
- Förster, F.; Maureira, J.C.;... **Martínez, J.**;... Vera, E; “*The High Cadence Transient Survey (HITS). I. Survey Design and Supernova Shock Breakout Constraints*”, 2016, ApJ, 832, 155.

## TALKS

- “*Compilation and characterization of light-curves catalogues for HiTS survey*” Pucón Symposium 2015: Advanced Tools Applied to Frontier Astronomy, BioMedicine and Massive Data-driven Sciences. Center for Mathematical Modeling, Universidad de Chile, Aug 25 - Aug 28, 2015.
- “*Compilation and characterization of light-curves catalogues for HiTS survey*” 22nd Los Alamos Stellar Pulsation Conference: wide-field variability surveys: a 21st-century perspective, San Pedro de Atacama, Chile, Nov. 28 - Dic. 2, 2016.
- “*Compilation and characterization of light-curves catalogues for HiTS survey*” SOCHIAS Annual Meeting, Marbella, Chile, Jan. 23 - 26, 2017.
- “*Compilation and characterization of light-curves catalogues for HiTS survey*” III Workshop LSST Chile, Santiago, Chile, Dec. 13 - 15, 2017.

## MISCELLANEOUS

- 2018 (Jun 25 - 29) Poster presentation at 34th IAP Conference: Massive black holes in evolving galaxies: from quasars to quiescence, Paris, France.
- 2018 (Jan. 28 - Feb. 3) Attended “48th Saas-Fee advanced course: Black hole formation and growth”, Saas-Fee, Switzerland.
- 2017 (Nov. 13 - 17) Poster presentation of thesis work at Southern Horizons in Time-Domain Astronomy, Stellenbosch, South Africa.
- 2017 (Nov. 7 - 10) Poster presentation of thesis work at Astroinformatics 2017, Cape Town, South Africa.
- 2017 (Oct. 22 - 28) Poster presentation at Astronomical Data Analysis Software and Systems, Santiago, Chile.

- 2017 (Aug. 30 - Sept. 1) Poster and oral presentation at CMM Pucón Symposium, Puerto Varas, Chile.
- **2017 (Mar. 6 - 7) Machine Learning in astronomy tutorial at Workshop de Estudiantes de Astronomia UChile, Santiago, Chile.**
- **2017 (Jan. 9 - 20) Attended Fourth Chile-Harvard Innovative Learning Exchange, CMM, Universidad de Chile, Santiago, Chile.**
- 2016 (Dic. 14 - 15) Attended “Third MAS Workshop”, Viña del Mar, Chile.
- 2016 (Dic. 12 - 13) Attended “Towards Science in Chile with LSST 2016: Workshop”, Viña del Mar, Chile.
- 2016 (July 1 - 31) Attended Third Chile-Harvard Innovative Learning Exchange, IACS, Harvard University, MA, US.
- **2016 (Apr. 11 - 15) Attended “Tutorial Session: Astrostatistics and R”, Eric Feigelson, Pontificia Universidad Católica, Santiago, Chile.**
- 2016 (Mar. 1 - 4) Poster presentation at SOCHIAS Annual Meeting, Antofagasta, Chile.
- 2016 (Jan. 4 - 14) Attended Third Chile-Harvard Innovative Learning Exchange, CMM, Santiago, Chile.
- 2015 - 2016 (Nov. 15 - Feb. 12) Internship at Institute for Applied Computation Science, supervised by Prof. Pavlos Protopapas, Harvard University, MA, US.
- **2015 (Aug. 15-22) Attended Third La Serena School for Data Science: “Applied Tools for Astronomy”, AURA, La Serena, Chile.**
- 2015 (Mar. 9-11) Attended Tools for Astronomical Big Data, Tucson, Arizona.
- 2015 (Mar. 11-14) Attended DECam Community Science Workshop, Tucson, Arizona.
- 2015 (Jan. 3-19) Attended Second Chile-Harvard Innovative Learning Exchange, AURA-La Serena, Chile and CMM-Santiago, Chile.