Benjamín Navarrete Rivas

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EDUCATION

MAR 2021 TO PRESENT	**MSc. student, Astronomy** Universidad de Chile, Santiago, Chile.
DEC 2020	**BSc. in Astronomy** Outstanding student 2019 & 2020 Universidad de Chile, Santiago, Chile.

RESEARCH EXPERIENCE

MAR 2021 TO PRESENT	MSc thesis project at OAN, Las Condes, Chile. Metallicity calibration of high redshift galaxies. Current research at DEPARTMENT OF ASTRONOMY (DAS) at NATIONAL ASTRONOMICAL OBSERVATORY (OAN), Santiago, Chile. Advisor: Dr. Valentino González (DAS)
FEB 2023 TO MAY 2023	ESO Summer Internship, Vitacura, Chile. Project: "*Zooming into the Universe! A Multiwavelength Perspective of Galaxy Sizes*". Studies on morphology and size of galaxies at $z \sim 1-9$ using JWST/NIRcam, HST/ACS & WFC3, and SED fitting including Herschel/PACS & SPIRE, Spitzer/MIPS24, & ALMA Band 6 data. Supervisor: Dr. Belén Alcalde-Pampliega (ESO/ALMA Fellow)
MAR 2021 TO JAN 2022	Blazar variability studies in preparation for the Cherenkov Telescope Array, Las Condes, Chile. Contribution to the FONDECYT project: "*Blazar variability studies in preparation for CTA*". Creation of python scripts for extraction of gamma-ray light curves of blazars. Preliminary studies of correlation between gamma-ray and radio light curves. Advisor: Dr. Walter Max-Moerbeck (DAS)
MAR 2020 TO AUG 2020	Guided Research I at FCFM, Santiago, Chile. Statistical studies of dark magnetic regions of the Sun at FACULY OF PHYSICAL AND MATHEMATICAL SCIENCE (FCFM). Outcome: Scientific article; Poster contribution at XVI SOCHIAS Annual Meeting 2020. Advisors: Dr. Luis Campusano (DAS); Dr. Andrés Muñoz-Jaramillo (SwRI)
JAN 2020	Research Practice at OAN, Las Condes, Chile. Provided detailed studies of extinction curves of local analogs of high redshift galaxies. Advisor: Dr. Valentino González (DAS)

PUBLICATIONS

1. Solar Anti-Hale Bipolar Magnetic Regions: A Distinct Population with Systematic Properties. A. Muñoz-Jaramillo, **B. Navarrete**, & L. Campusano. **ApJ**, 920, 31. (2021)

Awarded Observing Time

Jun 2023 *A Complete Picture of the Ionization Nature of Local Analogs of High-z Galaxies.*
Two nights on Magellan/FIRE at LCO, CNTAC 2023.
PI: Navarrete, B. Co-I: González, V.

Conferences, Schools, & Workshops

Mar 2023	*XVIII SOCHIAS Annual Meeting 2023*
Nov 2022	*CATA Area 3 meeting, Galaxy evolution.*
Oct 2022	*Galaxy evolution with the ESA-Euclid mission and ESO telescopes.*
Aug 2022	*I Postgraduate Congress FCFM 2022*
Mar 2022	*Science & Commit*
Jan 2022	*XVII SOCHIAS Annual Meeting 2022*
Dec 2020	*XVI SOCHIAS Annual Meeting 2020*

Teaching Experience

	Teaching Assistant at FCFM, Universidad de Chile, Santiago, Chile.
Spring 2022	AS4101-1 Astrophysics of Galaxies
	FI2002-4 Electromagnetism
Fall 2022	AS4101-1 Astrophysics of Galaxies
	FI2003-8 Experimental Methods
Spring 2021	AS4101-1 Astrophysics of Galaxies
	FI2002-3 Electromagnetism
Fall 2021	FI2003-4 Experimental Methods
Spring 2020	FI3104-1 Numerical Methods for Science and Engineering
Fall 2020	FI2003-4 Numerical Methods

Outreach

[Talk]	*The Universe is no longer as it was.* (May 2023)
[Workshop]	*Build your own Comet! by CATA* (Dec 2022, Mar 2023)
[Talk]	*Galaxy clash* (Dec 2022)
[Congress]	*Regional Congress of High School Research & Innovation* (Nov 2022)
[Talk]	*Venus: Our hot neighbor.* (August 2021)
[Talk]	*The Moon: So close and so far.* (July 2021)
[Talk]	*Interstellar Trips* (May 2021, Mar 2022, Jan 2022)

Computer Skills

Astronomy Oriented:	astroPy, CIGALE, Photutils, PypeIt, pPXF, SExtractor, GALFIT.
Proficient:	Python (NumPy, SciPy, Pandas, Scikit-learn, emcee), LaTeX, GitHub, Microsoft Office, Linux,
Basic Knowledge:	MatLab, R, SQL, HTML.

Languages

English:	Proficient User, C1 in CEFR level (TOEFL iBT total score: 100)
Spanish:	Mothertongue