

Dr. Néstor Espinoza

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Education

Pontificia Universidad Católica de Chile (PUC)
Ph. D. in Astrophysics (*summa cum laude*)
Advisor: Dr. Andrés Jordán

2012 — 2017

Fellowships & Awards

IAU-Gruber Fellowship

Fellowship awarded by The Gruber Foundation, selected by the International Astronomical Union (IAU, 25,000 USD prize for research).

2018

Bernoulli Fellowship

Joint position between the Max-Planck-Institut für Astronomie (MPIA) and the University of Bern.

2017 — 2019

Distinguished Graduate Student Award

Yearly award granted by the Chilean Astronomical Society.

2014

Grants

JWST Cycle 1 General Observers (GO) Program

160,000+ USD awarded to the project “The First Near-infrared Spectroscopic Phase-curve of a Super-Earth” (PI: Espinoza; GO 2159)

2021B — present

JWST Cycle 1 General Observers (GO) Program

150,000+ USD awarded to the project “Exploring the Morning and Evening Limbs of a Transiting Exoplanet” (PI: Espinoza; GO 2113)

2021B — present

TESS Cycle 3 Guest Investigator Program

40,000 USD allocated to the project “Towards Constraints On Morning And Evening Terminators Of Distant Worlds With TESS” (PI: Espinoza).

2020B — present

Software

Selected software under active development:

juliet — a versatile tool for transiting and non-transiting exoplanetary systems Lead developer juliet.readthedocs.io	2019—present
limbdarkening — software to compute stellar limb-darkening from model stellar atmospheres Lead developer github.com/nespinoza/limbdarkening	2015—present

Invited Talks

Selected invited talks given in the past five years:

Colloquium talk on “A new era of astronomy with JWST” Ole Rømer Colloquium, Institute of Physics and Astronomy, Aarhus Universitet, Denmark (Virtual Colloquium).	03/2022
Invited review talk on “Constraining Morning and Evenings on exoplanets” Atmospheres, Atmospheres! Do I look like I care about atmospheres? (Atmo 2021; Virtual Conference).	08/2021
Invited opening talk on “Detection & Characterization of Transiting Exoplanets in the Era of TESS and JWST” Chesapeake Bay Area Exoplanet Meeting, Carnegie DTM, Washington DC, USA.	01/2020
Invited talk: “Sniffing exoplanet atmospheres through systematic noise” Astronomical Time Series 2019, MPIA, Heidelberg, Germany.	01/2019
Invited talk on “Detection & Characterization of Transiting Exoplanets: from Kepler to TESS” Königstuhl Colloquium, MPIA, Heidelberg, Germany.	05/2018
Invited review talk on “C/O ratios & planet formation theories” Atmospheres of Disks and Planets Workshop, Ringberg Castle, Germany.	04/2017

Service

Selected relevant service experience in the past five years:

Co-chair of NASA’s ExoPAG Study Analysis Group 21 on “The Effect of Stellar Contamination on Space-based Transmission Spectroscopy” [link to report].	2019—2022
Reviewer for Nature Astronomy, The Journal of Open Source Software, The Astrophysical Journal, The Astronomical Journal, Astronomy & Computing and Publications of the Astronomical Society of the Pacific.	2018—present