

Curriculum Vitae

April 2020



Personal

Name	Ósmar Alí Rodríguez Suárez
Nacionality	Chilean
E-mail	olrodrig@gmail.com
Webpage	https://olrodrig.github.io
ORCID	0000-0001-8651-8772

Degrees

- Ph.D. (Astrophysics), Universidad Andrés Bello, Chile, 2019
- Master (Astrophysics), Pontificia Universidad Católica de Chile (PUC), 2013
- Bachelor (Astronomy), PUC, 2011

Primary research interest

SNe II as distance indicators. SNe II host galaxy extinction. Ejecta-CSM interaction in SNe II. Observations at optical and near-IR wavelengths. Statistical analysis.

Conferences and meetings

- Massive Stars and Supernovae Conference, Bariloche, Argentina, November 2018
Contributed talk: Near-IR Hubble Diagrams of SNe II
- IV MAS workshop, Machalí, Chile, January 2018
Contributed talk: SNe II as distance indicators at near-IR
- South American Supernovae (SAS), La Serena, Chile, April 2017
Contributed talk: SNe II as distance indicators at near-IR
Discussion: Extinction Laws for SNe II
- Supernovae Through the Ages Conference, Eastern Island, Chile, August 2016
Poster: Type II supernovae as distance indicators at near-IR wavelengths
- SAS, La Plata, Argentina, May 2016
Contributed talk: Luminous SNe II with unusually low expansion velocities
- XIII Annual SOCHIAS Meeting, Antofagasta, Chile, March 2016
Contributed talk: Type II supernovae as distance indicators at near-IR wavelengths
- MAS SN workshop, Santiago, Chile, January 2016
Contributed talk: Luminous type II SNe with unusually low expansion velocities
- SAS, Santiago, Chile, April 2015
Contributed talk: SNe II distances with near-IR data
- XII Annual SOCHIAS Meeting, Puerto Varas, Chile, March 2015
Poster: Distance measurements using near-IR photometry of CATS type II plateau supernovae

- XI Annual SOCHIAS Meeting, Los Andes, Chile, January 2014
Contributed talk: Distances from SNe II
- SNe II workshop, Santiago, Chile, August 2013
Contributed talk: Distances from SNe II

Invited talks

ESO Thirty minutes talk, Santiago, Chile, December 2018
Talk: Near-IR Hubble diagrams of SNe II

Grants

CONICYT grant for Ph.D. studies

Observational experience

- 26 nights in telescopes: 2.2m MPG+GROND (4 nights), 2.5m du Pont+WFCCD/RetroCam (12 nights), 3.6m NTT+EFOSC2/SOFI (9 nights), and 6.5m Clay+LDSS3 (1 night).
- 8 half nights of remote observations with the 4.1m SOAR+Spartan/Goodman.
- 68 hours on the 8.1m Gemini-S, triggering GMOS and FLAMINGOS-2.
- Experience scheduling observations on: 0.6m REM (80 hours), 0.6m TRAPPIST (60 nights), 0.8m IRIS (50 hours), 1.3m SMARTS (80 hours), and 1.0–2.0m LCO (110 hours) telescopes.

All of the above telescope time were obtained from original proposals I wrote, as part of my PhD thesis.

- In addition, with the 3.6m NTT telescope I carried out observations of transients (8 nights, EFOSC2/SOFI, as part of the PESSTO/ePESSTO survey) and lensed quasars (3 nights, EFOSC2). I also have experience scheduling observations on 0.4–1.0m PROMPT telescopes as part of the Chilean Automatic Supernova Search (CHASE).

Code development experience

- Author of the [Automated Loess Regression \(ALR\)](#) code (written in R and Python).
- Author of the [SN II Explosion Time from Optical Spectra \(SNII-ETOS\)](#) code (written in Python).
- In addition, I have experience creating reduction pipelines (using PyRAF) for optical and near-IR images.
- Experience in the following programming codes: Python, R, IRAF/PyRAF, FORTRAN, C, Java.

Participation in projects

- ePESSTO/ePESSTO+ science project: “Testing SNe II as distance indicators at near-IR wavelengths” (PI)
- ePESSTO+ science project: “Spectral follow-up of ATLAS SNe II: tying early-time to ‘plateau’ properties” (co-I)
- DES-GW project (member of the Chilean observing team)
- CHASE survey (co-I)

Astronomical society membership

Chilean Society of Astronomy (SOCHIAS), 2017-present