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# Luisa Fernanda Rodríguez Díaz

### Education

- 2018 2023 **PhD in Astronomy**, Stellar Astrophysics Centre (SAC), Department of Physics and Astronomy, Aarhus University. Aarhus, Denmark.
- 2018 2021 **MSc in Astronomy**, Stellar Astrophysics Centre (SAC), Department of Physics and Astronomy, Aarhus University. Aarhus, Denmark.
- 2013 2018 **B.Sc. Physics**, *Universidad de Los Andes*, *Bogotá*, *Colombia*. Cumulative average: 4.27/5.0. Bachelor's thesis: Study of the spectral variations of Antares.
- 2013 2018 Minor in German: language and culture, Universidad de Los Andes, Bogotá, Colombia.
- 2013 2018 Minor in Astronomy, Universidad de Los Andes, Bogotá, Colombia.

## Grants and Fellowships

- 2013 2018 **Quiero Estudiar Escala Scholarship** competitively awarded to excellent students with high performance at the ICFES test (government test applied to all students when they finish highschool), covering B.Sc. Physics tuition at *Universidad de los Andes*.
  - 2018 **Scholarship**, to attend a Summer Internship in Astrophysics in Mexico, provided by the *National Institute of Astrophysics*, *Optics and Electronics*, *INAOE* in spanish.
  - **Scholarship**, to attend the Second Radioastrophysics School in Mexico, provided by the *National Institute of Astrophysics, Optics and Electronics, INAOE* in spanish.
  - 2016 **Ernst-Reuter-Gesellschaft e.V. Scholarship** awarded by *Freie Universität Berlin* to attend an A2 German Course in Germany.

## Related experience

- 2022 **Guest researcher: University of Oxford, United Kingdom** Research stay to work with Prof. Suzanne Aigrain and her group.
- 2018- **STAGGER-code** a Fortran radiative-magnetohydrodynamics (R-MHD) code that solves the time-dependent hydrodynamic equations for the conservation of mass, momentum an energy.
- 2019 **Winter school: XXXI Canary Islands Winter School of Astrophysics: UNIVERSE in a BOX.** Computational Fluid Dynamics in Astrophysics, organized by the Instituto de Astrofísica de Canarias. Tenerife, Spain.
- 2019 **Summer school: NOT Summer school 2019** organized by the Instrument Center for Danish Astrophysics (IDA). La Palma, Spain.
- **Summer school: Space Astrometry for Astrophysics** at International School of Space Science. L'Aquila, Italy.
- **Summer Internship in Astrophysics** at National Institute of Astrophysics, Optics and Electronics, INAOE, Mexico.

- Project: Searching molecular gas in low-metallicity galaxies.
- 2017 **Summer courses: Gravitational lensing and Discovering Exoplanets,** Universidad de Antioquia jointly with Leiden Observatory. Medellín, Colombia.
- 2017 **Second Radioastrophysics School** at National Institute of Astrophysics, Optics and Electronics, INAOE, Mexico.
  - **Project:** searching the connection between thick gas and star formation. Data obtained with LMT.
- 2014 2018 **Projects** in analyzing stellar spectra of different stars, which included: measuring the differential rotation of the Sun and studying the spectral variations of AB Aurigae, a Herbig Ae/Be star, among others.
  - 2012 **Bronze Medal** at the IV Latin-American Astronomy and Astronautics Olympiad, with 34 students from 8 different countries.

#### Contributions at conferences

- 2021 Contributed talk PLATO Mission Conference, online.
- 2019 **Poster presentation** at the XXXI Canary Islands Winter School of Astrophysics: UNI-VERSE in a BOX. Tenerife, Spain.
- 2019 **Poster presentation** at the Stellar Hydro Days V workshop. Exeter, United Kingdom.
- 2019 **Poster presentation** at the Annual Danish Astronomy Meeting 2019. Nyborg, Denmark.
- 2016 **Poster presentation** at the XV Latin American Regional IAU Meeting, Cartagena, Colombia.

## Committees and collaborations

- 2022 **PLATO Science Consortium & PLATO Science Management** Member of PSM Work Package 123 200 (Surface convection (1D & 3D)).
- 2019 **PLATO Science Consortium & PLATO Science Management** Member of PSM Work Package 122 200 (3D Stellar Atmospheres).
- 2019 TESS Asteroseismic Science Consortium (TASC) Member.
- 2019 Kepler Asteroseismic Science Consortium (KASC) Member.

#### Additional education

- 2017 2018 **Participation in the german project "Chat der Welten"** Universidad de los Andes jointly with Eberhard Karls Universität Tübingen. Bogotá, Colombia.
  - 2016 **German course, level A2** at Freie Universität Berlin, Berlin, Germany. Final grade: 1.3 in the German system, A+ grade in the U.S. system.

# Programming languages

Proficient Python, LATEX, Bash

Familiar Fortran, IRAF, IDL, C++, MATLAB

# Working experience - Teaching

Aarhus **Teaching assistant** from 2018 at the IFA Challenge Track, which offers extra challenges University as modules in different areas to physics students during their bachelor's programme.

Additional courses: Experimental Physics 2, Stars and Planets (in danish).

Universidad Teaching assistant from 2014 to 2018 at the following undergraduate courses: Physics de los Andes 1 and 2, Waves and Fluids, Great Ideas of Physics, Planetary Astronomy, Stellar Astrophysics, Extragalactic Astronomy.

## Languages

Spanish Native language

English Fluent

Danish Fluent

German Proficient