# Ludving Adolfo Cano Fernandez

Undergraduate physics student, with research interests in radio astronomy and young stellar objects (astronomy). Also in particulate matter, aerosols, and LIDAR instrument (atmospheric sciences). Strong skills in data analysis in Python and scientific programming.

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## PERSONAL

**Date and Place of Birth:** September 27th, 1999, La Paz, Bolivia
**Address:** 19th Street 30, Obrajes, La Paz, Bolivia
**Phone:** (591) 60510095
**Email:** ludving.adolfo@gmail.com
**Languages:** Spanish (Mother tongue), English (Upper Intermediate), French (Elementary)

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## EDUCATION

**Bachelor in Physics** (2018-Present)
Universidad Mayor de San Andrés (UMSA), La Paz Bolivia
Relevant courses: Meteorology, experimental data analysis & atmospheric data analysis.

**High School Diploma** (2006-2017)
Colegio Santa Ana, La Paz, Bolivia

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## RESEARCH

**Bachelor thesis: "Structure and Kinematics of a Disk-Jet System"** (grade 95/100)
Project to pursue a bachelor's degree.
Supervisor: Gisela Ortiz-León. Instituto Nacional de Astrofísica, Óptica y Electrónica (INAOE), México

**Undergraduate research assistant** (2022 - present)
Laboratory of Atmospheric Physics (LFA). Global Atmosphere Watch program, UMSA, Bolivia
Focused on LIDAR instruments and data analysis.
Campaigns for measurements of Black Carbon and Greenhouse Gases in Bolivia

**Undergraduate research & outreach assistant** (Feb 2021 - Nov 2022)
Planetario Max Schreier, UMSA, Bolivia

**Internship: "How fast do galaxies grow?"**
IAstro Summer Internship 2022 Program, Instituto de Astrofísica e Ciências do Espaço (IA). July 2022.

**Undergraduate teaching assistant** (May 2020 - Dec 2020)
Pre-university preparation (physics) for entering the Faculty of Sciences. FCPN, UMSA, Bolivia

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# PUBLICATIONS

**Geometrical approximation of the North Galactic Pole with random stars from the disk**
Revista Boliviana de Física,  La Paz ,  v. 40, n. 40, p. 3-7,  nov.  2022
https://doi.org/10.53287/upvs6575hp32y .

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# CONFERENCES AND PRESENTATIONS

**Speaker: Iberoamerican Conference of Physics Students**
**"Structure and Kinematics of a Jet-Accretion Disk System"**
Pontificia Universidad Católica del Perú. December 2023

**Poster: International School for Young Astronomers (ISYA 2023)**
**"Structure and Kinematics of a Jet-Accretion Disk System"**
International Astronomical Union, INAOE, Puebla, México. July-August 2023

**Speaker: Online Workshop MW-Gaia: Bringing the Milky Way to schools 2021**
Instituto de Astrofísica e Ciências do Espaço (Porto) e Vilnius University. June 2021

**Speaker: Sociedad Boliviana de Física 2019**
"Bolivian Asteroid Search Campaign" Tarija, Bolivia

**Co-manager: South American Space Generation Workshop (October 2019)**
Space Generation Advisory Council, La Paz, Bolivia

**Participation: Global Hands-on Universe Conference 2019**
Global Hands-on Universe, Galileo Teacher Training Program
Observatoire de Haute Provence, France

**Participation: Space Generation Fusion Forum 2019**
Bolivian delegate, Space Generation Advisory Council
April 2019, Colorado Springs, USA.

**Keynote speaker: Aerospace Bolivian Conference 2019**
Representing the Bolivian Asteroid Search Campaign
La Paz, Bolivia

## VOLUNTEERING

**National coordinator and founder: All Bolivian Asteroid Search Campaign (2018-2023)**
International Astronomical Search Collaboration, IAU-NOC Bolivia

**Planetario Max Schreier (2018 - Present)**
Volunteer and coordinator of the faculty's astronomy club

**National Point of Contact for Bolivia (2019-2021)**
Space Generation Advisory Council, Vienna, Austria

**Instructor and organizing committee: Ciencia en Casa (Octubre 2020)**
Clubes de Ciencia Bolivia, Nos Gusta la Ciencia, UMSA

**Volunteer: Latin American Workshop in Nonlinear Phenomena (October 2019)**
Faculty of Natural and Pure Sciences, UMSA

## COURSES AND DIPLOMAS

**International School for Young Astronomers (ISYA 2023)**
International Astronomical Union, INAOE, Puebla, México. July-August 2023

**Very Large Telescope Interferometer - Hands-On Workshop (ESO - VLTI-How)**
ESO, Santiago de Chile, Chile. October 2022

**Statistics with Python Specialization** (2023)
University of Michigan, Coursera Online Courses

**Escuela de Astronomía Observacional para Estudiantes Latinoamericanos (ESAOBELA)**
UNAM, INAOE. Puebla, México. January 2022

**ESCAPE Summer School on Data Science for Astronomy, Astroparticle and Particle Physics**
The European Science Cluster of Astronomy & Particle Physics ESFRI Research Infrastructures. June 2021

**Europlanet Virtual Summer School "Asteroid Photometry" (2.5 ECTS)**
Europlanet. Vilnius University, Lithuania. August 2021

**Dunlap Instrumentation Virtual Summer School**

Dunlap Institute for Astronomy & Astrophysics. University of Toronto. July 2021

**Data Science Specialization** (2020)
> **Data Science: Foundations using R Specialization** (2020)
> **Data Science: Statistics and Machine Learning Specialization** (2020)

Johns Hopkins University, Coursera Online Courses

**Python for Everybody Specialization** (2020)
University of Michigan, Coursera Online Courses

**IBM certifications:**
- Python for Data Science (2020)
- R Essentials (2020)
- Data Science Foundations (2020)

**Online Course: Astronomy: Exploring Time and Space** (2020)
University of Arizona, Coursera Online Courses

**Online Course: From the Big Bang to Dark Energy (2020)**
Online, Coursera, University of Virginia

**Online Course: Data-Driven Astronomy** (2020)
The University of Sydney, Coursera Online Courses

**Online Course: Introduction to Data Science with Python (2020)**
Online, Coursera, University of Virginia

**Online Course: Introduction to programming with Matlab (2020)**
Online, Coursera, Vanderbilt University

**Online Course: How to write a scientific paper (2020)**
Online, Coursera, École Polytechnique

**Yuri's Night (April 2019)**
Organizer of the first Yuri's Night in La Paz, Bolivia.

**Provisional discovery of asteroid 2019 SX45**
International Astronomical Search Collaboration