

Dr. Anahí Caldú Primo

CV

Professional experience

07.2021 – present Senior scientist for **Science Communication**

Department of Astrophysics, University of Vienna, Austria

- Coordination of Astronomy to go - Team of the mobile planetarium
- Coordination of guided tours of the observatory
- Contact for press releases
- Coordination of the conference series "Nachts auf der Sternwarte"
- Coordination of science fairs

07.21 – 11.23 **Director of studies** for the Bachelor's and Master's degree programs in Astronomy

Department of Astrophysics, University of Vienna, Austria

- Administration of the study programs
- Chairing of the working group to develop new Bachelor's and Master's degree programs
- Coordination of semester timetables

01.20 – 03.21 **Content creator** for the Unit of Communication and Scientific Culture

Institute of Astronomy – UNAM, Mexico City, Mexico

- Development and implementation of communication campaigns during COVID
- Conception and realization of the television series Vindictas Ciencias with TV-UNAM

01.19 – 10.19 Director of **Outreach**

National Council for Science and Technology (CONACyT) - Mexico City, Mexico

- Conceptualization of calls for proposals for nationwide science communication projects
- Coordination of the publication of the journals: Ciencia y Desarrollo and Helix
- Direction of the connection between the CONACyT press team and the scientists

09.17 – 01.19 **Science Communication Coordinator**

Institute for Radioastronomy and Astrophysics (IRyA) – UNAM, Morelia, Mexico

- Coordination of new scientific workshops for different target groups
- Coordination and presentation of public lectures on various astronomy topics
- Coordination of press releases on important research results
- Development of texts on various astronomical topics
- Management of the institute's social media

01.17 – 07.17 Field application engineer for optical systems

FRAMOS, Munich, Germany

03.11 - 17.11 Research Internship

University of California, Santa Cruz

- Spectroscopical study of M-dwarfs under the supervision of Dr. Guhathakurta

Education

09.11 – 07.15 **PhD in Astrophysics**

University of Heidelberg/Max Planck Institute of Astronomy, Germany

- Thesis "Velocity dispersions of molecular gas in nearby galaxies", Dr. rer. nat. (**Magna Cum Laude**)

08.09 – 02.11 **Master in Astrophysics**

Institute of Astronomy – UNAM, Mexico

- Completion through general examinations (final grade: 9.67 out of 10)
- **Paris-Pishmish Prize** for the best note of the year 2011

- Thesis: Multiwavelength study of the massive star formation regions in NGC3184 und NGC3938
 - **Prize for the best bachelor thesis** in astronomy in 2008
 - **Scholarship for an exchange program** at the University of Copenhagen (Aug. 05 - Jan. 06)
 - Final score: 9.67 out of 10
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Publications

Cruz-González, I., Gómez-Ruiz, A. I., **Caldú-Primo, A.**, et al., *Early science with the LMT: molecular tours in UGC 5101*, 2020, MNRAS, 499,2

Caldú-Primo, A. & Schruha, A. *Molecular Gas Velocity Dispersions in M31*, 2016, AJ, 151, 34

Mogotsi, K.M, de Blok, W.J.G, **Caldú-Primo, A.** Walter, F., Ianjamasimanana, R., and Leroy, A.K. *HI and CO Velocity Dispersions in Nearby Galaxies*, 2016, AJ, 151, 15

Ianjamasimanana, R., de Blok, W.J.G., Walter, F., Heald, G.H., **Caldú-Primo, A.**, and Jarrett, T.H. *The Radial Variation of HI Velocity Dispersions in Dwarfs and Spirals*, 2015, AJ, 150, 47

Caldú-Primo, A. et al. *Spatially Extended and High – velocity Dispersion Molecular Gas Component in Spiral Galaxies: Single – dish vs. Interferometric Observations*, 2015, AJ, 149, 76

Caldú-Primo, A., et al. *A High-dispersion Molecular Gas Component in Nearby Galaxies*, 2013, AJ, 146,150

Caldú-Primo, A., et al. *Density Effect on Multiwavelength Luminosities on Star–formation Regions in NGC 3184 and NGC 3938*, 2009, A&A, 493, 33

Science Communication

Publications

Caldú-Primo, A. *El hilo rojo de la humanidad*, Revista de la Universidad de México No. 917, February 2025

Caldú-Primo, A. *El lado oscuro de los colores, ¿Cómo ves?* No. 264, October 2020

Caldú-Primo, A. *Montones de exoplanetas, ¿Cómo ves?* No. 256, March 2020

Caldú-Primo, A. *¿Qué es la radioastronomía?*, 2019, Ciencia y Desarrollo, No. 303, Sep./Oct. 2019.

Caldú-Primo, A. & Cervantes-Sodi, B. *Tras las Huellas de la Materia Oscura*, Saber Más, No. 42, Nov./Dec. 2018.

Caldú-Primo, A. *Cuando la Luna se vuelve súperluna*, Scientific Reading Program 2018-2019 of Institute of Science, Technology and Innovation of Michoacan, 2018

Public talks and round tables

Factcheck Astronomie 08.12.23 - Kinder Büro, University of Vienna

Kurbeln statt Schwurbeln -
Hidden Figures 25.05.23 - Discussion round at the University of Vienna

Voyager, our interstellar
messenger 12.05.23- *Nachts auf der Sternwarte*, Department of Astrophysics, University of Vienna

18.11.20 - Clavius Astronomy Center, Iberoamerican University, Mexico

06.03.20 - *El Universo los Viernes* Institute of Astronomy – UNAM, Mexico

	02.10.19 - Scientific coffee of the State Council for Science and Technology of Tabasco in Emiliano Zapata, Mexico
	05.04.19 - Book and Rose Festival, Mexico
Introduction to spectroscopy	13.10.22 - Austrian Astronomical Society
Water on the moon	21.11.20 - Night of the Stars in La Paz, Mexico.
The Plinio from Mexico	20.11.20 - Round table at the Culture House of Ozumba, Mexico.
Mission Artemis	22.08.20 - Round table at the Electoral Institute of Mexico City
Exploring the solar system	17.06.20 - Clavius Astronomy Center, Iberoamerican University, Mexico 12.03.20 - Science fair at Motolinia University, Morelia, Mexico.
Radio astronomy, listening to the universe?	02.04.20 - Facebook Live for astronomy in times of COVID, Institute of Astronomy – UNAM, Mexico.
Exoplanets	06.02.20 - Cultural Week The Plinio of Mexico "José Antonio Alzate", House of Culture of Ozumba, Mexico. 31.11.19 - Night of the Stars, hosted by the Southern California Council for Science and Technology, La Paz, Mexico 02.05.19 - XIX Week of Science Communication of the Research Institute for Optical Communication in San Luis Potosi, Mexico. 03.04.19 - Modern American School, Mexico City, Mexico 09.10.18 - Space week on ITESO, Guadalajara, Mexico. 05.10.18 - Astronomical lectures at Jacaranda Cultural, Patzcuaro, Mexico. 27.09.18 - Lic. Felipe Rivera Planetarium, Morelia, Mexico.
Opening lecture	19.08.19 - "Scientific Empowerment Camp: For more women in science and technology", organized by the National Department of Astrophysics, Optics and Electronics (INAOE), Mexico.
Fifty years after the moon landing	14.08.19 - Clavius Astronomy Center, Iberoamerican University, Mexico 20.07.19 - Mexican Railway Museum in Puebla, Mexico. 26.04.19 - <i>Viernes de Astronomía</i> , Institute for Radio Astronomy and Astrophysics – UNAM, Mexico.
What lies between the stars	12.10.18 - Lic. Felipe Rivera Planetarium, Morelia, Mexico.
Television	<i>Vindictas Ciencias</i> Series as part of the Vindictas program from TV-UNAM. Research, writing and moderation of the 2020 season with 10 episodes: Paris Pishmish (astronomy), Aída Hernández Castillo (social anthropology), Ruth Gall (geophysics), Catalina Eibenschutz (public health), Graciela Salicrup (mathematics), Helia Bravo (biology), Herminia Pasantes (cell physiology), Esther Orozco (biochemistry), Alejandra Jáidar (physics) and María Antonia González (art and science)
Science fairs	
Research Festival Lower Austria	2023, 2022 - Organization and implementation of an exhibition stand
KinderUni, University of Vienna	2025, 2023, 2022 - Participation with a workshops in different languages
Lange Nacht der Forschung	2022 - Organization of the observatory site with 13 activities
Night of the stars	2020, 2018, 2017 - Organization of the event at a specific location

A walk through sciences 2019 - Organization of the participation of the Institute of Astronomy in the International Day of Women and Girls in Science

Festival of the humanities and sciences 2018, 2017 - Organization of the participation of IRYA

Outreach-Projects

Astronomy to go - mobile planetarium 07.21 – present

- Coordination of project of bringing a mobile planetarium to schools
- Reach of 7 000 pupils per year

Visit the University Observatory 07.21 – present

- Coordination of public and private tours of University of Vienna Observatory

Nachts auf der Sternwarte 07.21– present

- Coordination of a monthly series of talks on Astronomy for the general public

Astronomy vs. Astronomy 09.20 – 12.20.

- Conception and development of the project
- Round tables on an astronomical topic from different points of view

Astronomy in times of COVID 03. 20 – 06.20

- Conception and development of the project
- Outreach presentations on Facebook Live for the Institute of Astronomy - UNAM.

2 minutes of astronomy 03.20 –12.20

- Conception and development of the project
- Short videos on astronomical topics for the Institute of Astronomy - UNAM

Exchange of knowledge 12.18

- Approved funding for the development of a PAPIME/UNAM project
- Visiting communities to create communication channels to understand the local importance of astronomy and how the sky is studied in research institutes

UNAM your neighborhood 2018

- Development and organization of the project, in which four different institutes of the UNAM campus in Morelia were involved.
- Direct participation in the planned dates for astronomy and mathematics

Astronomy for primary schools 2015

- Conception and development of a course for pupils aged 8 to 10 years at Schlosswiesenschule, Eschelbronn, Germany

Teaching

Preparatory and research seminars for the Master's degree MA compulsory courses. Winter semester 2026, 2024, 2022, summer semester 2025 at University of Vienna.

Science communication in astronomy BA and MA elective course. Summer semester 2023, 2022 at University of Vienna.

Exercises for Theoretical Astrophysics Compulsory BA courses. Summer semester 2023 at University of Vienna.

Astronomical practical course on spectroscopy Compulsory BA courses. Winter semester 2023, 2022 at University of Vienna.

Mobile planetarium workshop BA and MA elective course. Winter semester 2026, 2023, summer semester 2025 at University of Vienna.

Basics of astronomy	Compulsory course for admission to the Master's program in Astronomy, summer semester 2018 at IRyA- UNAM.
Astronomical practical course	MA compulsory courses. Teaching assistant, winter semester 2013 at University of Heidelberg.
Extragalactic astronomy and cosmology	Compulsory BA courses. Teaching assistant, summer semester 2010 at Faculty of Sciences - UNAM.
Anthropogenic global warming	BA elective course. Teaching assistant, winter semester 2010 at Faculty of Sciences – UNAM.

Supervision of students

07.23 – 07.24	Supervision of the Master's thesis "Cosmic perspectives on climate: introduction to astronomy as a tool for greenhouse gas formation" by Vesna Schnabl.
03.23 – 06.23	Supervision of the bachelor thesis "Astronomy for high school students: A workshop on the habitability of planets" by Amelie Finan.
03.22 – 06.22	Supervision of the Bachelor's thesis "The search for potentially life-sustaining capacities in exoceans on icy moons in the outer solar system and their ongoing scientific communication" by Joseph Pfusterer.
06.18 – 12.18	Supervision of the social services of Tania Naylley Ávila and Perla Berenice Herrejón, graphic communication design students at the Universidad Latina de América in Morelia, Mexico.

Institutional Engagement

07.25 - present	First aider at the Department of Astrophysics of the University of Vienna
01.23 – 11.23, 02.25 – present	Mid-level representative for the Gender and Diversity Working Group of the Faculty of Earth Sciences, Geography and Astronomy (FGGA) at the University of Vienna.
09.22 – 11.23	Mid-level representative of the FGGA of the University of Vienna.
09.22 – 11.23 02.25 – present	Middle-level representative at the Board of the Department of Astrophysics of the University of Vienna.
08.18 – 01.19	Member of the Security Commission at IRyA-UNAM.
05.18 – 01.19	Member of the Equal Opportunities Commission at IRyA-UNAM.
02.18 – 01.19	Member of the Election Commission at IRyA-UNAM.

Workshops and further training

03.25	Decision making for team leaders at University of Vienna, Austria.
03.25	Storytelling at University of Vienna, Austria.
11.23	No to harassment and mobbing, University of Vienna, Austria.
11.22	Science, gender and mobility, University of Vienna, Austria.
10.22	Successfully organizing events that are critical of racism, University of Vienna, Austria.
05.20	Workshop "Essays on science communication" at DGDC - UNAM, Mexico.

- 07.18 STEAM Summer school on science communication, Valletta, Malta.
 - 08.16 Workshop “Science to Data Science” (S2DS), London, Great Britain.
 - 08.13 7. IRAM-Summer school, Pradollano, Spain.
 - 06.12 Workshop on star formation in dwarf galaxies, Flagstaff, AZ, EUA.
 - 08.13 13. Synthese-Imaging-Workshop NRAO, Socorro, NM, EUA.
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Conferences

- 06.25 European Astronomical Society Conference 2025, Cork, Ireland - 2 contributed talks.
 - 07.23 European Astronomical Society Conference 2023, Krakow, Poland - contributed talk.
 - 05.21 Communicating Astronomy with the Public 2021, Online - plenary talk
 - 12.20 IAU Symposium 367 “Education and Heritage in the Era of Big Data in Astronomy”, Mendoza, Argentina - poster
 - 09.20 “Second Shaw-IAU Workshop on Astronomy for Education”, Heidelberg, Germany - contributed talk.
 - 09.19 Super VOSS 2019: The Search for Extra-Astronomical Life, Castelgandolfo, Italy - contributed talk.
 - 08.18 XX Congress of Somedicyt (Mexican Society for Science and Technology), Guanajuato, Mexico - contributed talk.
 - 08.18 International Astronomical Union Conference, Vienna, Austria- Organization of a Mexican stand at the event location.
 - 07.14 Galaxies in 3D Across the Universe, Vienna, Austria - contributed talk and poster.
 - 10.13 ISM – SPP conference: Physical Processes in the ISM, MPE Garching, Germany - poster.
 - 08.13 AG Jahrestagung 2013, Tübingen, Germany - contributed talk.
 - 07.13 Phases of the ISM 2013, Heidelberg, Germany - contributed talk.
 - 04.13 The Modern Radio Universe, Bonn, Germany - poster.
 - 11.10 Latin American Conference of the IAU, Morelia, Mexico - poster.
 - 09.09 XXIII National Conference for Astronomy, Ensenada, Mexico - contributed talk und poster.
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Additional competences

- Languages** Spanish - Native
- English -Full professional proficiency
- German- Professional working proficiency