

# Anibal Estuardo Sierra Morales

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Mullard Space Science Laboratory - University College London, England, United Kingdom

## PROFESSIONAL EXPERIENCE

- **Associate Professor** Since November 2025  
*Instituto de Astronomía* Ciudad de México
- **Postdoctoral researcher in Astrophysics** June 2024 - October 2025  
*Mullard Space Science Laboratory, University College London* London, England  
Working in the Planet Formation group of Dr. Paola Pinilla
- **Postdoctoral researcher in Astrophysics** April 2024 - May 2024  
*Pontificia Universidad Católica de Chile* Santiago de Chile, Chile  
Working in the group of Dr. Viviana Guzmán
- **Postdoctoral Fondecyt Fellow** April 2022 - March 2024  
*Agencia Nacional de Investigación y Desarrollo (ANID)* Santiago de Chile, Chile  
Working in the group of Dr. Laura Pérez
- **Postdoctoral researcher in Astrophysics** March 2020 - February 2022  
*Facultad de Ciencias Físicas y Matemáticas, Universidad de Chile* Santiago de Chile, Chile  
Working in the group of Dr. Laura Pérez

## EDUCATION

- **Ph.D. in Astrophysics** January 2016 - December 2019  
*Instituto de Radioastronomía y Astrofísica - Universidad Autónoma de México* Morelia, México  
Thesis: Dust dynamics and emission in protoplanetary disks. Advisor: Dr. Susana Lizano
- **M.Sc. in Astrophysics** January 2014 - December 2015  
*Instituto de Radioastronomía y Astrofísica - Universidad Autónoma de México* Morelia, México  
Thesis: Dust dynamics in protoplanetary disks. Advisor: Dr. Susana Lizano
- **B.Sc. in Physics** January 2008 - December 2013  
*Facultad de Ciencias Físicas y Matemáticas - Universidad de San Carlos de Guatemala* Guatemala, Guatemala  
Thesis: Group representation in physics. Advisor: Ing. Rodolfo Samayoa

## SELECTED HONORS AND AWARDS

- **Robert Boyd award** 2025  
*Space and Climate Physics, University College London* United Kingdom  
Outstanding Scientific Achievement
- **Ph.D. thesis award** 2021  
*División de Astrofísica de la Sociedad Mexicana de Física* México  
Best Ph.D. thesis done in Mexico or by mexicans abroad (period 2020-21)
- **Alfonso Caso Medal** 2020  
*Universidad Autónoma de México* México  
Best student of the generation, Ph.D. in Astrophysics
- **Alfonso Caso Medal** 2015  
*Universidad Autónoma de México* México  
Best student of the generation, M.Sc. in Astrophysics
- **Cum Laude degree** 2013  
*Universidad de San Carlos de Guatemala* Guatemala  
B.Sc. in Physics
- **University student excellence award** 2013  
*Universidad de San Carlos de Guatemala* Guatemala  
Best student of the generation, Faculty of Engineering, Physics & Mathematics
- **Faculty student excellence award** 2009-2012  
*Universidad de San Carlos de Guatemala* Guatemala  
Best physics student of the year for 4 years

## SUPERVISED THESIS

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- **co-Advisor M.Sc. Thesis in Astrophysics.** 2022-2023  
*Student: Luz Maritza Caballero Cano. Instituto de Radioastronomía y Astrofísica* Morelia, México  
Thesis: "Propiedades del polvo en el disco protoplanetario alrededor del sistema HD 142527"
- **Advisor M.Sc. Thesis in Physics.** 2022-to date  
*Student: Erick Alexander Rojas García. Universidad de San Carlos de Guatemala* Guatemala, Guatemala  
Thesis: "Impact of dust porosity on the radiative transfer properties in protoplanetary disks"

## STUDENT SUPERVISION

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- **Supervision of a B.Sc. project** 2025  
*Universidad Autónoma de Sinaloa. México.* Student: Litzy Guzmán
- **co-Supervision of a M.Sc. project** 2022-2023  
*Universidad Autónoma de México. México. Research to be included in a paper in preparation* Student: Luz Caballero
- **Supervision of a M.Sc. project** 2022-to date  
*Universidad de San Carlos de Guatemala. Guatemala* Student: Erick Rojas
- **Supervision of a B.Sc. project** 2023-2024  
*Universidad de Chile. Chile. Research to be included in a paper in preparation* Student: Benjamín Carrera
- **Supervision of a B.Sc. project** 2022-2023  
*Universidad de Chile. Chile. Research included in a paper published in The Astrophysical Journal (ApJ)* Student: Benjamín Sotomayor
- **Supervision of summer research project** 2021-2024  
*Universidad de Chile. Chile* 7 B.Sc. students

## TEACHING EXPERIENCE

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- **Lecturer** 2020  
*Faculty of Physics and Mathematics, Universidad de Chile* Santiago de Chile, Chile  
General astronomy. Undergrad-level course for engineers and scientist students
- **Teaching assistant** 2019  
*Escuela Nacional de Estudios Superiores, Universidad Autónoma de México* Morelia, México  
Distributed computing. Undergrad-level course for science and technology students
- **Teaching assistant** 2018  
*Escuela Nacional de Estudios Superiores, Universidad Autónoma de México* Morelia, México  
Image analysis using Python. Undergrad-level course for science and technology students
- **Teaching assistant** 2013  
*Faculty of Engineering, Universidad Francisco Marroquín* Guatemala, Guatemala  
Calculus, linear algebra. Undergrad-level course for engineers students
- **Physics laboratory teacher** 2013  
*Physics Department, Universidad de San Carlos de Guatemala* Guatemala, Guatemala  
Classical Mechanics, Electromagnetism, and Optics. Undergrad-level laboratory for physics students

## GRANTS AND SCHOLARSHIPS

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- **FONDECYT fellow** 2022-2024  
*Agencia Nacional de Investigación y Desarrollo (ANID)* Chile  
[I applied for and received government funding to cover my postdoctoral expenses, including salary, computational resources, conference fees, and stipends.](#)
- **CONACYT** 2016-2019  
*Consejo Nacional de Ciencia y Tecnología* México  
Scholarship for Ph.D. studies
- **CONACYT - OEA - AMEXCID** 2016  
*Organización de los Estados Americanos - Agencia Mexicana de Cooperación Internacional para el Desarrollo* México  
Ph.D. travel and accommodation
- **CONACYT - OEI** 2016  
*Organización de los Estados Iberoamericanos* México  
Ph.D. travel and accommodation

<ul style="list-style-type: none"> <li>• <b>CONACYT</b> Consejo Nacional de Ciencia y Tecnología Scholarship for M.Sc. studies</li> </ul>	2014-2015 México
<ul style="list-style-type: none"> <li>• <b>CONACYT - OEA - AMEXCID</b> Organización de los Estados Americanos - Agencia Mexicana de Cooperación Internacional para el Desarrollo M.Sc. travel and accommodation</li> </ul>	2014 México
<ul style="list-style-type: none"> <li>• <b>USAC Grant</b> Universidad de San Carlos de Guatemala Grant for B.Sc. studies</li> </ul>	2008-2013 Guatemala

## PROFESSIONAL SERVICE

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<ul style="list-style-type: none"> <li>• <b>per-Reviewer</b> Scientific articles in <i>ApJ</i>, <i>ApJL</i>, and <i>A&amp;A</i>. ~ 2 papers per year</li> </ul>	Since 2021
<ul style="list-style-type: none"> <li>• <b>Secretary</b> Central America and Caribbean association for Astronomy Sciences (Alpha-Cen)</li> </ul>	2020-2021
<ul style="list-style-type: none"> <li>• <b>Evaluation commission</b> Guatemalan Basic Sciences Olympiad</li> </ul>	2012-2013
<ul style="list-style-type: none"> <li>• <b>ad-Honorem teacher assistant</b> Faculty of Engineering, Universidad de San Carlos de Guatemala</li> </ul>	2011

## OBSERVATIONAL EXPERIENCE

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- **Awarded observation time:** ALMA and VLA (as PI and Co-I), APEX, and JWST (as Co-I)  
Full list of observational time at [anibalsierram.github.io/Research.html](https://anibalsierram.github.io/Research.html)

## PRESENTATIONS AND SCIENTIFIC TALKS

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- **Colloquium and Seminar speaker** at over 12 different universities and observatories.
- **Contributed speaker** to over 6 national and international conferences  
Full list of Seminar and contributed speaker at [anibalsierram.github.io/Talks.html](https://anibalsierram.github.io/Talks.html)

## PUBLIC OUTREACH

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- **Speaker at multiple events for general public.** Guatemala, Mexico, and Chile. ~ 30 events.
- **Scientific press releases for ALMA Large program papers.** [alma-maps.info/press.html](https://alma-maps.info/press.html), and AGE-PRO website in progress.

## REFERENCES

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1. **Susana Lizano**  
Professor, Instituto de Radioastronomía y Astrofísica  
Universidad Autónoma de México  
Email: [s.lizano@irya.unam.mx](mailto:s.lizano@irya.unam.mx)  
*M.Sc. and Ph.D. advisor*
2. **Laura Pérez**  
Professor, Departamento de Astronomía  
Universidad de Chile  
Email: [lperez@das.uchile.cl](mailto:lperez@das.uchile.cl)  
*Postdoctoral supervisor*
3. **Paola Pinilla**  
Professor, Mullard Space Science Laboratory  
University College London  
Email: [p.pinilla@ucl.ac.uk](mailto:p.pinilla@ucl.ac.uk)  
*Postdoctoral supervisor*
4. **Myriam Benisty**  
Director, Max Planck Institute for Astronomy  
Email: [benisty@mpia.de](mailto:benisty@mpia.de)  
*Active Scientific collaborator*