Maria Teresa **Valdivia-Mena**

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Education

PhD (Dr. rer. nat) in Astrophysics — *Sep. 2020 - Present*

Max Planck Institute for Extraterrestrial Physics — *Garching, Germany*

- Expected thesis defense date: August 2023.
- Enrolled through the International Max Planck Research School

M.Sc. in Astronomy — *Mar. 2018 - Aug. 2020*

Universidad de Chile — *Santiago, Chile*

Thesis: Molecular Clouds in Extreme Enviroments of the Low-Metallicity Magellanic System

B.Sc. in Astronomy — *Mar. 2014 - Dec. 2017*

Universidad de Chile — *Santiago, Chile*

- Obtained a Minor in Scientific Computing together with the B.Sc.
- Graduated with highest distinction.

Research interests

- Kinematic properties of gas around embedded protostars
- Streamers and asymmetric infall mechanisms from the natal core and beyond towards protostellar disks
- Molecular emission properties of the Interstellar Medium
- Early stages of low-mass star formation

Skills

Languages	Spanish (native) English (C1), German (A2)
Programming languages	Python, C, Java, R
CASA	Imaging of interferometric data and use of the ALMA pipeline
GILDAS	Use of CLASS for imaging of single-dish data and MAPPING for imaging of interferometric data
Version controlling tools	Git

Publications

- **Valdivia-Mena, M. T. , Pineda, J. E., Segura-Cox, D. M., et al.**, *PRODIGE - Envelope to disk with NOEMA I. The first streamer feeding a Class I protostar*, submitted to Astronomy & Astrophysics on February, 2022
- **Valdivia-Mena, M. T., Rubio, M., Bolatto, A. D, et al.**, *ALMA resolves molecular clouds in metal-poor Magellanic Bridge A*, 2021, Astronomy & Astrophysics, 641, A97

Talks

Mar. 4th 2022 **Meeting of ALMA Young Astronomers**, *Title: Rivers in the sky: streamers discovered towards two Class I sources in Perseus*, Virtual

Nov. 5th 2021 **12th IMPRS Students Symposium**, *Title: River in the sky: A streamer feeding a Class I protostar* , Max Planck Institute for Astrophyics, Garching, Germany

Oct. 29th 2021 **Gaps, Rings, Spirals, and Vortices: Structure Formation in Planet-Forming Disks**, *Title: A Class I protostar with a high streamer mass infall rate*, Munich Institute for Astro- and Particle Physics, Garching, Germany

Jun. 30th 2021 **European Astronomical Society Annual Meeting 2021**, *Title: River in the sky: A streamer feeding a Class I protostar*, Virtual

Nov. 8th 2019 **Latin American Regional IAU Meeting 2019**, *Title: ALMA observations of molecular tracers in R136 in 30Dor: How does cold gas survive?*, Hotel Antofagasta, Antofagasta, Chile