María José Maureira

CV

Office Address

Astronomy department, Yale University P.O. Box 208101 New Haven, CT, 06520-8101 Contact Information

E-mail: mariajose.maureira@yale.edu http://www.astro.yale.edu/mariajose

Education

• PhD Astronomy, Yale University

2011-present

Thesis: Probing the Earliest Phases of Star Formation: Characterization of First

 $Core\ Candidates$

Advisor: Dr. Héctor Arce

• Master of Science in Astronomy, Universidad de Chile

2011

Thesis: The structure of MgII gas halos at high redshift

Advisor: Dr. Sebastián López

• Bachelor of Science in Astronomy

Universidad de Chile

2009

Other Research Experience

• Research Assistant, Abdul Latif Jameel Poverty Action Lab, regional office in Chile Fall 2012

• Astronomy Research assistant, Universidad de Chile

Spring 2008-Fall 2009

Astronomy internship, Las Campanas Observatory

January 2008

Teaching Experience

• **Teaching Assistant** at Yale University

Frontiers and Controversies in Astrophysics
Archeoastronomy
Spring 2014
Planets and Stars
Fall 2014

 \bullet $\boldsymbol{Lecturer}$ at Universidad Andrés Bello

Fundamentals of Physics

Spring 2010

• Teaching Assistant at Universidad de Chile

Observational astronomy
Newtonian physics
Astronomy summer school for high school students
Thermodynamics
Autumn 2010
Autumn 2008-2010
Summer 2009
Spring 2008

Skills

• Computing

OS: GNU/Linux, Windows

Programming: Python, Matlab, R, C/C++, Java, LaTeX, shell-scripting(bash, csh)

Astronomy Tools: MIRIAD, IRAF, MIDAS, CASA Plotting: Matplotlib (Python, Matlab), SuperMongo

Numerical/Astronomy libraries: numpy, scipy, astropy, lmfit (All in Python)

\bullet Languages

Spanish (native), English (fluent)

Refereed Publications

• Lead Author

Maureira, Maria Jose; Arce, Hector; Dunham, Michael M.; Pineda, Jaime E.; Fernandez-Lopez, Manuel; Chen, Xuepeng; Mardones, Diego.

Kinematics of a young low-mass star forming core: Understanding the evolutionary state of the First Core Candidate L1451-mm, accepted to ApJ. arXiv:1612.01581

• Co-Author

Andrews et al. (incl M. Maureira), Galaxy Clusters in the Line of Sight to Background Quasars. III. Multi-object Spectroscopy, 2013, ApJ, 774, 40A.

Noterdaeme et al. (incl M. Maureira), Discovery of a compact gas-rich damped Lyman- galaxy at z = 2.2: evidence of a starburst-driven outflow, 2012, AA, 540A, 63N.

Contreras et al. (incl M. Maureira), The Carnegie Supernova Project: First Photometry Data Release of Low-Redshift Type Ia Supernovae, 2010, AJ, 139, 519C.

Tejos et al. (incl M. Maureira), Casting Light on the "Anomalous" Statistics of Mg II Absorbers Toward Gamma-ray Burst Afterglows: The Incidence of Weak Systems, 2009, ApJ, 706, 1309T.

Honors and Awards

• Fulbright Scholarship to Doctoral studies

2011-2015

 \bullet Scholarship to Master and Doctoral studies

Chilean national commission to scientific and technological research (CONICYT)

2009-2015

Conferences and Workshops

• Talk Contributions

- "ALMA observations of Envelopes around First Core Candidates" Star Formation Regional Meeting at Yale University, January 2017
- "Kinematics of envelopes around two first cores candidates" Star Formation Regional Meeting at HarvardSmithsonian Center for Astrophysics, January 2016

- "Kinematic study of intervening MgII absorbers in GRB sightlines" at Chilean Astronomical Society annual reunion. Universidad de Concepción, Chile. January 2010.

• Poster Contributions

- Kinematics of envelopes around First Core Candidates, Workshop on Dense Cores: origin, evolution and collapse, Monterrey, CA. (2014)
- Probing the Earliest Phases of Star Formation: Observations of Two First Core Candidates,
 Protostars and Planets VI, Heidelberg, Germany. (2013)
- Kinematic study of intervening absorbers in GRB sightlines, IAU General Assembly. Rio de Janeiro, Brazil. (2009)

• Attendance

- "Summer School in Statistics for Astronomers" International workshop. Pennsylvania State University, U.S. June 2012.
- "Supercomputing techniques in astrophysics" International workshop. Universidad Católica, Santiago, Chile. April 2010.
- "Galaxy clusters in the Early Universe" International meeting. Pucón, Chile. November 2009.

Service & Outreach

- Volunteered at All Our Kin, U.S. based non-profit organization that supports and sustains community child care providers.
 2015
- President of the student organization "Master students of Astronomy" at Universidad de Chile. 2010
- Chile National Astronomical Observatory Guide.
- Volunteered to support students of under performing schools (by helping them to strengthen their fundamentals/basic subjects) at Santiago, Chile.
 Spring 2008