

Gijs D. Mulders, PhD

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Current position

Assistant Professor, Pontificia Universidad Católica de Chile

Areas of Specialization

Population Statistics of Extrasolar Planets
Numerical Simulations of Planet Formation
Structure and Evolution of Protoplanetary Disks

Appointments held

2025-now Assistant Professor, Pontificia Universidad Católica, Santiago, Chile
2021-2025 Assistant Professor, Universidad Adolfo Ibáñez, Santiago, Chile
2018-2021 Postdoctoral Research Associate, University of Chicago, USA
2013-2018 Postdoctoral Research Associate, University of Arizona (UofA), Tucson, USA

Education

2013 PhD Astronomy, University of Amsterdam, NL
2008 MSc Astronomy and Astrophysics, University of Amsterdam, NL
2006 BSc Physics and Astronomy, University of Amsterdam, NL

Research Grants

2025-2029 Fondecyt Regular: **Where are the Water Worlds?** (PI)
2025-2027 Joint Committee ESO-Government of Chile: **The Influence of Cold Jupiters in the Formation of Close-in Planets** (PI)
2022-2025 Fondecyt Iniciación: **The Grand Architectures of planetary Systems** (PI)

Affiliations

2022-now	<i>Investigador Asociado</i> ; Centro de Astrofísica y Tecnologías Afines (CATA), Chile
2021-now	Alien Earths (alienearthss.space)
2021-2024	<i>Investigador Joven</i> ; Millennium Institute for Astrophysics (MAS), Chile
2015-2021	Earths in Others Solar systems (eos-nexus.org)

Professional Membership

2023-now	International Astronomical Union (IAU)
2022-now	<i>Sociedad Chilena de Astronomía</i> (SOCHIAS), Chile
2018-now	SIG #2, NASA Science Interest Group on Exoplanet Demographics
2015-now	NASA Nexus for EXoplanet System Science (nexss.info)
2016-2021	American Astronomical Society
2015-2017	SAG-13, NASA Science Analysis Group on Exoplanet Occurrence Rates and Distributions

Observing Time

2024-2025	ALMA cycle 11: <i>The Smallest Structured Disks</i> (PI), 2024.1.00583.S
2022	ALMA cycle 9: <i>The Fellowship of the Ring: Completing the Sample</i> (PI), 2022.1.01302.S
2022	ALMA cycle 9: <i>The most compact disks in Lupus: the start of super-Earth formation?</i> (co-I), 2022.1.00154.S
2022-now	Hubble Space Telescope Cycle 30-31: <i>The 25,000-Lightcurve HST-Kepler Treasury Survey</i> (co-I)
2022	ALMA Cycle 9: <i>An Unbiased Survey of Disk Structures and Planet Formation around Very Low-mass Stars in Taurus</i> (co-I), 2022.1.01531.S
2019	ALMA Cycle 7: <i>An Unbiased Survey of Disk Structures and Planet Formation around Very Low-mass Stars in Taurus</i> (co-I), 2019.1.00566.S
2016	ALMA Cycle 4: <i>An unbiased survey of disk structures in Taurus</i> (co-I), 2016.1.01164.S
2015	ALMA Cycle 3: <i>First ALMA observations of young circumplanetary disks</i> (co-I), 2015.1.00806.S
2015	ALMA Cycle 3: <i>Establishing the Disk Mass-Stellar Mass Scaling Relation</i> (co-I), 2015.1.00333.S
2013	ALMA Cycle 2: <i>Establishing the Disk Mass-Stellar Mass Scaling Relation</i> (co-I), 2013.1.00437.S

Publications

84+ refereed papers (15+ first-author), 6225+ citations, h-index 45+
(For an up to date list see [ads](#) or [Google Scholar](#))

REVIEWS

- 2025 Fernandes, Johnson *et al.*, [Are We There Yet? Challenges in Quantifying the Frequency of Earth Analogs in the Habitable Zone](#), *PASP*, 137:121001
- 2024 **Mulders**, [Exoplanet Populations and their Dependence on Host Star Properties](#), *Handbook of Exoplanets*, 2nd Edition, by Springer Nature
- 2023 Drążkowska, Bitsch *et al.*, [Planet Formation Theory in the Era of ALMA and Kepler: from Pebbles to Exoplanets](#), *Protostars and Planets VII*, *ASPC*, 534:717
- 2018 **Mulders**, [Planet Populations as a Function of Stellar Properties](#), *Handbook of Exoplanets*, 1st Edition, by Springer Nature

JOURNAL ARTICLES

- 2026 Chakrabarty, **Mulders** *et al.*, [The Radius Cliff is a Waterfall: Explaining Sub-Neptune Exoplanets with Steam Worlds](#), *ApJ*, 999:188
- 2026 Bosschaart, Guerra-Alvarado *et al.*, [Gaps and Rings: A Near-Universal Trait of Extended Protoplanetary Discs](#), *arXiv:arXiv:2602.12906*
- 2025 McCloat, **Mulders**, and Fieber-Beyer, [Diversity in Planetary Architectures from Pebble Accretion: Water Delivery to the Habitable Zone with Pebble Snow](#), *ApJ*, 992:200
- 2025 Parashivamurthy and **Mulders**, [Radius valley scaling among low-mass stars with TESS](#), *A&A*, 703:A8
- 2025 Lefèvre-Forján and **Mulders**, [Saturns, but Not Super-Jupiters, Occur More Frequently in the Presence of Inner Super-Earths](#), *ApJ*, 988:101
- 2025 Fernandes, Bergsten *et al.*, [Signatures of Atmospheric Mass Loss and Planet Migration in the Time Evolution of Short-period Transiting Exoplanets](#), *AJ*, 169:208
- 2025 Guerra-Alvarado, van der Marel *et al.*, [A high-resolution survey of protoplanetary disks in Lupus and the nature of compact disks](#), *A&A*, 696:A232
- 2025 Bryson, Kunimoto *et al.*, [Why Estimating \$\eta_{\oplus}\$ is Difficult: A Kepler-Centric Perspective](#), *PASP*, 137:124401
- 2025 Shoshi, Muto *et al.*, [ALMA High-resolution Observation for the Transitional Disk Around IRAS 04125+2902](#), *ApJ*, 993:90
- 2025 Sanchez, Paardekooper *et al.*, [New migration patterns in high planet-star mass ratio systems in discs with low viscosity](#), *A&A*, 703:A169
- 2024 Chakrabarty and **Mulders**, [Where Are the Water Worlds? Identifying Exo-water-worlds Using Models of Planet Formation and Atmospheric Evolution](#), *ApJ*, 966:185
- 2024 Sanchez, van der Marel *et al.*, [Rocky planet formation in compact disks around M dwarfs](#), *A&A*, 689:A236
- 2024 Shi, Long *et al.*, [Small and Large Dust Cavities in Disks around Mid-M Stars in Taurus](#), *ApJ*, 966:59
- 2023 Bergsten, Pascucci *et al.*, [No Evidence for More Earth-sized Planets in the Habitable Zone of Kepler's M versus FGK Stars](#), *AJ*, 166:234

- 2023 Fernandes, Hardegree-Ullman *et al.*, Using Photometrically Derived Properties of Young Stars to Refine TESS's Transiting Young Planet Survey Completeness, *AJ*, 166:175
- 2023 Long, Ren *et al.*, A Large Double-ring Disk Around the Taurus M Dwarf J04124068+2438157, *ApJ*, 949:27
- 2023 Kalyaan, Pinilla *et al.*, The Effect of Dust Evolution and Traps on Inner Disk Water Enrichment, *ApJ*, 954:66
- 2022 Fernandes, **Mulders** *et al.*, pterodactyls: A Tool to Uniformly Search and Vet for Young Transiting Planets in TESS Primary Mission Photometry, *AJ*, 164:78
- 2022 Bergsten, Pascucci *et al.*, The Demographics of Kepler's Earths and Super-Earths into the Habitable Zone, *AJ*, 164:190
- 2021 **Mulders**, Drążkowska *et al.*, Why Do M Dwarfs Have More Transiting Planets?, *ApJL*, 920:L1
- 2021 **Mulders**, Pascucci *et al.*, The Mass Budgets and Spatial Scales of Exoplanet Systems and Protoplanetary Disks, *ApJ*, 920:66
- 2021 van der Marel and **Mulders**, A Stellar Mass Dependence of Structured Disks: A Possible Link with Exoplanet Demographics, *AJ*, 162:28
- 2021 Kalyaan, Pinilla *et al.*, Linking Outer Disk Pebble Dynamics and Gaps to Inner Disk Water Enrichment, *ApJ*, 921:84
- 2021 van der Marel, Bosman *et al.*, If you like C/O variations, you should have put a ring on it, *A&A*, 653:L9
- 2021 Jin, Bose *et al.*, New Evidence for Wet Accretion of Inner Solar System Planetesimals from Meteorites Chelyabinsk and Benenitra, *PSJ*, 2:244
- 2020 **Mulders**, O'Brien *et al.*, Earths in Other Solar Systems' N-body Simulations: The Role of Orbital Damping in Reproducing the Kepler Planetary Systems, *ApJ*, 897:72
- 2020 Dulz, Plavchan *et al.*, Joint Radial Velocity and Direct Imaging Planet Yield Calculations. I. Self-consistent Planet Populations, *ApJ*, 893:122
- 2020 Manara, Natta *et al.*, X-shooter survey of disk accretion in Upper Scorpius. I. Very high accretion rates at age > 5 Myr, *A&A*, 639:A58
- 2019 **Mulders**, Mordasini *et al.*, The Exoplanet Population Observation Simulator. II. Population Synthesis in the Era of Kepler, *ApJ*, 887:157
- 2019 Fernandes, **Mulders** *et al.*, Hints for a Turnover at the Snow Line in the Giant Planet Occurrence Rate, *ApJ*, 874:81
- 2019 Pascucci, **Mulders**, and Lopez, The Impact of Stripped Cores on the Frequency of Earth-size Planets in the Habitable Zone, *ApJL*, 883:L15
- 2019 Lodato, Dipierro *et al.*, The newborn planet population emerging from ring-like structures in discs, *MNRAS*, 486:453
- 2019 Hippke, David *et al.*, Wotan: Comprehensive Time-series Detrending in Python, *AJ*, 158:143
- 2019 Flock, Turner *et al.*, Planet formation and migration near the silicate sublimation front in protoplanetary disks, *A&A*, 630:A147
- 2019 Currie, Marois *et al.*, No Clear, Direct Evidence for Multiple Protoplanets Orbiting LkCa 15: LkCa 15 bcd are Likely Inner Disk Signals, *ApJL*, 877:L3
- 2019 Pineda, Szulágyi *et al.*, High-resolution ALMA Observations of HD 100546: Asymmetric Circumstellar Ring and Circumplanetary Disk Upper Limits, *ApJ*, 871:48
- 2019 Long, Herczeg *et al.*, Compact Disks in a High-resolution ALMA Survey of Dust Structures in

the Taurus Molecular Cloud, *ApJ*, 882:49

- 2018 **Mulders**, Pascucci *et al.*, *The Exoplanet Population Observation Simulator. I. The Inner Edges of Planetary Systems*, *AJ*, 156:24
- 2018 Pascucci, **Mulders** *et al.*, *A Universal Break in the Planet-to-star Mass-ratio Function of Kepler MKG Stars*, *ApJL*, 856:L28
- 2018 Kopparapu, Hébrard *et al.*, *Exoplanet Classification and Yield Estimates for Direct Imaging Missions*, *ApJ*, 856:122
- 2018 Long, Herczeg *et al.*, *An ALMA Survey of Faint Disks in the Chamaeleon I Star-forming Region: Why Are Some Class II Disks so Faint?*, *ApJ*, 863:61
- 2018 Hendler, Pinilla *et al.*, *A likely planet-induced gap in the disc around T Cha*, *MNRAS*, 475:L62
- 2018 Long, Pinilla *et al.*, *Gaps and Rings in an ALMA Survey of Disks in the Taurus Star-forming Region*, *ApJ*, 869:17
- 2018 Jamialahmadi, Ratzka *et al.*, *Constraining the Gap Size in the Disk around HD 100546 in the Mid-infrared* *ApJ*, 865:137
- 2018 Honda, Okada *et al.*, *Mid-infrared multi-wavelength imaging of Ophiuchus IRS 48 transitional disk*, *PASJ*, 70:44
- 2017 **Mulders**, Pascucci *et al.*, *Constraints from Dust Mass and Mass Accretion Rate Measurements on Angular Momentum Transport in Protoplanetary Disks*, *ApJ*, 847:31
- 2017 Long, Herczeg *et al.*, *An ALMA Survey of CO Isotopologue Emission from Protoplanetary Disks in Chamaeleon I*, *ApJ*, 844:99
- 2017 Manara, Testi *et al.*, *X-shooter study of accretion in Chamaeleon I. II. A steeper increase of accretion with stellar mass for very low-mass stars?*, *A&A*, 604:A127
- 2017 Hendler, **Mulders** *et al.*, *Hints for Small Disks around Very Low Mass Stars and Brown Dwarfs*, *ApJ*, 841:116
- 2016 **Mulders**, Pascucci *et al.*, *A Super-solar Metallicity for Stars with Hot Rocky Exoplanets*, *AJ*, 152:187
- 2016 Pascucci, Testi *et al.*, *A Steeper than Linear Disk Mass-Stellar Mass Scaling Relation*, *ApJ*, 831:125
- 2016 Thalmann, Janson *et al.*, *Resolving the Planet-hosting Inner Regions of the LkCa 15 Disk*, *ApJL*, 828:L17
- 2016 Stolker, Dominik *et al.*, *Scattered light mapping of protoplanetary disks*, *A&A*, 596:A70
- 2016 Herczeg, Dong *et al.*, *The Eruption of the Candidate Young Star ASASSN-15QI*, *ApJ*, 831:133
- 2016 Min, Bouwman *et al.*, *The abundance and thermal history of water ice in the disk surrounding HD 142527 from the DIGIT Herschel Key Program*, *A&A*, 593:A11
- 2016 Garufi, Quanz *et al.*, *The SPHERE view of the planet-forming disk around HD 100546*, *A&A*, 588:A8
- 2015 **Mulders**, Pascucci, and Apai, *A Stellar-mass-dependent Drop in Planet Occurrence Rates*, *ApJ*, 798:112
- 2015 **Mulders**, Pascucci, and Apai, *An Increase in the Mass of Planetary Systems around Lower-mass Stars*, *ApJ*, 814:130
- 2015 **Mulders**, Ciesla *et al.*, *The Snow Line in Viscous Disks around Low-mass Stars: Implications for Water Delivery to Terrestrial Planets in the Habitable Zone*, *ApJ*, 807:9
- 2015 Ciesla, **Mulders** *et al.*, *Volatile Delivery to Planets from Water-rich Planetesimals around Low Mass Stars*, *ApJ*, 804:9
- 2015 Thalmann, **Mulders** *et al.*, *Optical Imaging Polarimetry of the LkCa 15 Protoplanetary Disk with*

- SPHERE ZIMPOL, *ApJL*, 808:L41
- 2015 Hillen, de Vries *et al.*, The evolved circumbinary disk of AC Herculis: a radiative transfer, interferometric, and mineralogical study, *A&A*, 578:A40
- 2015 Honda, Maaskant *et al.*, High-resolution 25 μm Imaging of the Disks around Herbig Ae/Be Stars, *ApJ*, 804:143
- 2015 Rigliaco, Pascucci *et al.*, Probing Stellar Accretion with Mid-infrared Hydrogen Lines, *ApJ*, 801:31
- 2014 Hillen, Menu *et al.*, An interferometric study of the post-AGB binary 89 Herculis. II. Radiative transfer models of the circumbinary disk, *A&A*, 568:A12
- 2014 Thalmann, Mulders *et al.*, The architecture of the LkCa 15 transitional disk revealed by high-contrast imaging, *A&A*, 566:A51
- 2014 Pineda, Quanz *et al.*, Resolved Images of the Protoplanetary Disk around HD 100546 with ALMA, *ApJL*, 788:L34
- 2014 Panić, Ratzka *et al.*, Resolving HD 100546 disc in the mid-infrared: Small inner disc and asymmetry near the gap, *A&A*, 562:A101
- 2014 Ellerbroek, Podio *et al.*, Relating jet structure to photometric variability: the Herbig Ae star HD 163296, *A&A*, 563:A87
- 2013 Mulders, Paardekooper *et al.*, Planet or brown dwarf? Inferring the companion mass in HD 100546 from the wall shape using mid-infrared interferometry, *A&A*, 557:A68
- 2013 Sturm, Bouwman *et al.*, The 69 μm forsterite band in spectra of protoplanetary disks. Results from the Herschel DIGIT programme, *A&A*, 553:A5
- 2013 Mulders, Radiative transfer models of protoplanetary disks: Theory vs. observations PhDT,;
- 2013 Mulders, Min *et al.*, Why circumstellar disks are so faint in scattered light: the case of HD 100546, *A&A*, 549:A112
- 2012 Honda, Maaskant *et al.*, Mid-infrared Imaging of the Transitional Disk of HD 169142: Measuring the Size of the Gap, *ApJ*, 752:143
- 2012 Mulders and Dominik, Probing the turbulent mixing strength in protoplanetary disks across the stellar mass range: no significant variations, *A&A*, 539:A9
- 2012 Min, Canovas *et al.*, The effects of disk and dust structure on observed polarimetric images of protoplanetary disks, *A&A*, 537:A75
- 2011 Mulders, Waters *et al.*, Low abundance, strong features: window-dressing crystalline forsterite in the disk wall of HD 100546, *A&A*, 531:A93
- 2011 Verhoeff, Min *et al.*, The complex circumstellar environment of HD 142527, *A&A*, 528:A91
- 2010 Mulders, Dominik, and Min, Full two-dimensional radiative transfer modelling of the transitional disk LkCa 15, *A&A*, 512:A11
- 2010 Thalmann, Grady *et al.*, Imaging of a Transitional Disk Gap in Reflected Light: Indications of Planet Formation Around the Young Solar Analog LkCa 15, *ApJL*, 718:L87
- 2010 Sturm, Bouwman *et al.*, First results of the Herschel key program “Dust, Ice and Gas In Time” (DIGIT): Dust and gas spectroscopy of HD 100546, *A&A*, 518:L129
- 2010 van Kempen, Green *et al.*, Dust, Ice, and Gas In Time (DIGIT) Herschel program first results. A full PACS-SED scan of the gas line emission in protostar DK Chamaeleontis, *A&A*, 518:L128
- 2010 Verhoeff, Min *et al.*, HD 95881: a gas rich to gas poor transition disk?, *A&A*, 516:A48

NON-REFEREED PAPERS

- 2025 Gonglewski, Bergsten *et al.*, **No Turnover Found in Giant-Planet Occurrence Within 3 au Around Low-mass Stars**, RNAAS, 9:356
- 2023 Prepared by the ExoPAG Science Interest Group, Exoplanet Demographics *et al.*, **Enabling Exoplanet Demographics Studies with Standardized Exoplanet Survey Meta-Data**, arXiv:2304.12442
- 2019 Bennett, Akeson *et al.*, **Wide-Orbit Exoplanet Demographics**, BAAS, 51:505
- 2019 Apai, Banzatti *et al.*, **Planetary Habitability Informed by Planet Formation and Exoplanet Demographics**, BAAS, 51:475
- 2019 Bryson, Bennett *et al.*, **Making Exoplanet Surveys Useful for Statistical Population Studies**, BAAS, 51:443
- 2019 Kopparapu, Hebrard *et al.*, **Exoplanet Diversity in the Era of Space-based Direct Imaging Missions**, BAAS, 51:12
- 2018 Apai, Ciesla *et al.*, **A comprehensive understanding of planet formation is required for assessing planetary habitability and for the search for life**, arXiv:1803.08682

SOFTWARE

- 2025 Chakrabarty & **Mulders**, **GPS: Genesis Population Synthesis**, ascl.soft.,:ascl:2503.016
- 2022 Fernandes, **Mulders et al.**, **pterodactyls: A Tool to Uniformly Search and Vet for Young Transiting Planets In TESS Primary Mission Photometry**, Zenodo, 10.5281/zenodo.6667960
- 2019 Hippke, David *et al.*, **Wotan: Stellar detrending methods**, ascl.soft.,:ascl:1907.030
- 2018 **Mulders**, **EPOS: The Exoplanet Population Observation Simulator**, Zenodo, doi:10.5281/zenodo.1247569

Teaching & Mentoring

POSTDOCTORAL RESEARCHERS

- 2024-now P. Curone, U. Chile & CATA
2022-2024 A. Chakrabarty, UAI & Data Observatory

GRADUATE STUDENTS

- 2026-now B. Ambalapatta Kannancheri, PUC
2025 D. Yaptangco, Imperial College London (co-advised)
2023-now H. M. Parashivamurthy, Universidad de Chile
2021-2024 S. McCloat, University of North Dakota (co-advised)
2017-2023 R. B. Fernandes, UofA (co-advised)

MASTER THESES

- 2025-now S. Ramirez Vargas, PUC, MSc.
2023-2026 J. J. Parada Arellano, UAI, MSc. Data Science

UNDERGRADUATE THESES

- 2025-now S. Loyola, PUC
2025-now F. Olmeda, PUC
2025-now M. Valderrama, PUC
2023-2024 E. J.-P. Lefevre Forjan, PUC

RESEARCH PROJECTS

- 2025-2026 *Investigación A,B, o C* (Graduate research project): PUC: S. Aroli Veettil; V. A. Ortuzar Garzon: A.M. Panfichi Sanborn
2025-2026 *Concurso de Investigación para Pregrado*; PUC: P. Villalobos Aliste; S. Loyola; F. Olmeda
2021-2023 *Taller de Investigación Dirigida*, UAI: N. I. Salazar Valdebenito; F. Cespedes Urzua; J.-P. J. Martinez Ormazabal (2x); J. J. Parada Arellano (3x); V. A. Galaz Reyes (2x); J. Sanhueza Magarinos
2017-2018 H. Ambrose, Arizona Space Grant intern
2016-2017 Q. Chance, UofA undergraduate research
2016-2017 I. J. Winner, Arizona Space Grant intern

Teaching

COURSES

- 2026 *Un Paseo por el Universo*, (undergraduate level), PUC
2025 Extrasolar Planets, (graduate level), PUC
2024 *Física Computacional para Data Science*, (graduate level), 50% with Pablo Benitez-Llambay, UAI
2024 *Física II*, (Gravity, Oscillations & Waves, Thermodynamics), Spanish Section, Viña del Mar, UAI
2024 *Física II*, (Gravity, Oscillations & Waves, Thermodynamics), Spanish Section, Peñalolen, UAI
2023 Physics II¹ (Gravity, Oscillations & Waves, Thermodynamics), English Section, UAI

¹Course Coordinator

- 2022 Physics I (Mechanics), English Section, UAI
 2022 Physics II (Gravity, Oscillations & Waves, Thermodynamics), English Section, UAI
 2021 Physics III (Electromagnetism), English Section, UAI

GUEST LECTURES

- 2025 “Exoplanet demographics”, in *Taller de astronomía* (undergraduate level), by J. Gonzalez, PUC
 2024 “Exoplanet Formation through Pebble Accretion” (graduate level), by S. Casassus, U de Chile
 2020 Guest Lecture and Activity (online), “Extra-solar Planets” (introductory level), by C. Chang, U. Chicago
 2015 “Exoplanets: Discovery and Characterization” (advanced level), by T. Barman, UofA
 2015-2017 (3x), “Astrobiology: A Planetary Perspective” (introductory level) by I. Pascucci, UofA
 2015 “Origin of the Solar System and Other Planets” (advanced level) by I. Pascucci, UofA

TEACHING ASSISTANT

- 2011 Cosmology (advanced level) by S. Markoff, University of Amsterdam
 2010 Planetary Systems (introductory level) by C. Dominik, University of Amsterdam
 2009 Astrophysics (introductory level) by L. Kaper, University of Amsterdam
 2009-2010 (2x), Astronomy² (introductory level) by M. Van der Klis, University of Amsterdam

TRAINING

- 2025 *Diplomado en Docencia Universitaria, Ud 5: Tecnologías e IA para la docencia*, PUC
 2025 *Diplomado en Docencia Universitaria, Ud 1: Ser Docente en la UC*, PUC
 2023 *Diplomado en Aprendizaje y Enseñanza en Educación Superior, Ud 4: Metodologías de enseñanza y aprendizaje*, UAI
 2023 *Diplomado en Aprendizaje y Enseñanza en Educación Superior, Ud 3: Evaluación para el aprendizaje*, UAI
 2023 *Diplomado en Aprendizaje y Enseñanza en Educación Superior, Ud 2: Diseño y planificación de cursos*, UAI

Service activities

SERVICE TO THE ACADEMIC COMMUNITY

- 2025 ExoGuide, NASA’s Exoplanet Exploration Program (virtual)
 2024-now Scientific Organizing Committee, Exoplanets VI, Porto, Portugal
 2024 Scientific Organizing Committee, TESS Science Conference III, MIT Cambridge, USA
 2023 Scientific Organizing Committee, GMT science community meeting, Washington DC
 2020 Session Chair, Exoplanet Demographics conference (virtual)
 2020 Online Moderator, Exoplanets III, online conference
 2020 Session Chair, AAS 235th Meeting, Honolulu, HI
 2019 Session Chair, Lake Michigan Exoplanet Meeting, Chicago, IL
 2018 Co-organizer, breakout session, Habitable Worlds conference, Laramie WY

²Awarded Teaching assistant of the year 2010-2011

- 2016 Session chair, DPS 47th Annual Meeting, Pasadena, CA, USA
- 2016 Member, Technical review of the final Kepler catalogue
- 2015 LOC member and session chair, Star and Planet Formation I Conference, Tucson, AZ
- 2015 Member, Kepler Hack Week Core science team, NASA Ames

SERVICE TO THE UNIVERSITY

- 2025-now Organizer, Colloquia and Seminars, PUC, Chile
- 2022-2024 Organizer and chair, Exoplanet group meetings (weekly), UAI
- 2018-2019 Co-organizer, Exoplanet Journal Club, University of Chicago
- 2016-2018 Member, College of Science Workplace Climate Committee, University of Arizona
- 2016-2018 Member, Postdoctoral Guide Committee, University of Arizona
- 2016-2017 Member, Departmental Life Committee, LPL
- 2014-2018 Co-organizer, weekly ORIGINS seminar, Steward Observatory and LPL
- 2009-2012 Co-organizer and chair, NOVA network 2 meetings, NL (twice a year)

REVIEW

- 2009-now Referee for Nature, ApJ, ApJL, AJ, PNAS, A&A & MNRAS
- 202X ANID Fondecyt, Beca Magister, Gemini
- 202X ALMA large program review
- 202X CAS-ANID joint committee
- 20XX NASA Hubble Fellowship
- 20XX NASA TESS Guest Investigator Peer Review Panel
- 20XX NASA Earth and Space Science Fellowship
- 2015-2020 NASA ROSES proposal review panels (ADAP, ATP, EW & HW)

Public Outreach

- 2024 Columnist, [EMOL](#), *Mundos Acuáticos en el Universo*
- 2023 Columnist, [EMOL](#), *Las raíces comunes de la astronomía y la astrología*
- 2023 Columnist, [EMOL](#), *Una explosión de cobetes*
- 2022 Columnist, [EMOL](#), *Las nueve vidas de Hubble*
- 2021 Columnist, [El Mostrador](#), *¿Dónde están las tierras alienígenas?*

Talks

CONFERENCES AND WORKSHOPS

- 2026 (invited review) Workshop “Shoulders of Giants”, Turin, Italy
- 2026 (invited review) Ringberg Workshop “From Galaxies to planets: an elemental journey”, Ringberg, Germany
- 2026 Workshop on planets around M dwarfs, Lund, Sweden
- 2025 XX SOCHIAS Meeting, Puerto Montt, Chile

2024 (invited) XIX SOCHIAS Meeting, Arica, Chile
 2024 TESS Science Conference III, MIT Cambridge, USA
 2024 Ringberg Workshop “Density Matters”, Ringberg, Germany
 2023 (invited) Open Problems in the Astrophysics of Gas Giants, Puerto Natales, Chile
 2023 (invited) GMT Community Science Meeting, Washington DC, USA
 2023 (invited) Towards Other Earths III: The Planet-Star connection, Porto, Portugal
 2023 Protostars and Planets VII, Kyoto, Japan (co-author review chapter)
 2023 Discos de Santiago meeting, ESO Santiago, Chile
 2023 DO Data Science congress I, Santiago, Chile
 2022 (invited) Exoplanets IV, Las Vegas, USA
 2022 ISSI workshop “Zooming In On Rocky Planet Formation” pt. 2, Bern, Switzerland
 2022 XVII SOCHIAS Meeting, Chile, online
 2021 AAS 237, online
 2020 DPS 52nd Annual Meeting, online
 2020 Exoplanets III, online conference
 2020 ISSI workshop “Zooming In On Rocky Planet Formation” pt. 1, Bern, Switzerland
 2020 AAS 235, Honolulu, HI
 2020 (invited) ExoPAG 21st meeting, Honolulu, HI
 2019 (invited) From Stars to Planets II Conference, Gothenburg, Sweden
 2019 (invited) Planet-Star Connections in the Era of TESS and Gaia, Santa Barbara, CA
 2019 Kepler & K2 Science Conference V, Glendale, CA
 2018 (invited) Astrophysical Frontiers in the Next Decade and Beyond, Portland, OR
 2017 (invited) LAMOST-Kepler workshop, Brussels, Belgium
 2017 (review) Habitable Worlds: A system science workshop, Laramie, WY
 2017 Astrobiology Science Conference, Mesa, AZ
 2016 DPS 47th Annual Meeting, Pasadena, CA
 2016 New Directions in Planet Formation, Leiden, Netherlands
 2016 AAS 227, Kissimmee, FL
 2015 K2 science conference, Santa Barbara, CA
 2015 XXIX IAU General Assembly, Honolulu, HI
 2015 SPFR: Star and Planet Formation in the Southwest, Tucson, AZ
 2014 DPS, 46th Annual Meeting, Tucson, AZ
 2014 Search For Life Beyond The Solar System, Tucson, AZ
 2013 Second Kepler Science Conference, Mountain View, CA
 2012 From Atoms to pebbles: Herschel’s view on star and planet formation, Grenoble, France

SEMINARS AND COLLOQUIA

2025 Seminar, Mullard Space Science Laboratory, UK
 2025 Astrophysics Seminar, Imperial College London, UK
 2025 Astrophysics Seminar, Universidad Diego Portales, Santiago, Chile
 2024 Star & Planet Formation & Evolution seminar, Kapteyn Institute, Groningen, Netherlands
 2024 Leiden Observatory lunch talk, Leiden, Netherlands
 2023 ESO Colloquium, Santiago, Chile
 2023 UdeC Astronomy Seminar, Concepcion, Chile
 2023 Institute of Astrophysics Colloquium, PUC, Santiago, Chile
 2021 ALMA-JAO colloquium, ESO Santiago, online

2021 Star and Planet Formation Webinar, ESO Garching, online
 2021 Seminar Departamento de Astronomía de la Universidad de Chile, online
 2021 Origins Seminar (virtual), University of Arizona, Tucson, AZ
 2020 DAO Astronomy Colloquium, Victoria, BC, Canada
 2020 Physics & Astronomy Colloquium, Rice University, Houston, TX
 2020 Colloquium, Universidad Adolfo Ibáñez, Santiago, Chile
 2019 SPF seminar, MPIA, Heidelberg, Germany
 2019 Exoplanets and Disks Meeting, University of Amsterdam
 2019 CSH seminar, University of Bern, Switzerland
 2018 Chicagoland Exoplanet Meeting, Evanston, IL
 2018 Astro Lunch Seminar, University of Washington, Seattle, WA
 2018 A&A Seminar, Penn State University, PA
 2017 Astrophysics Colloquium, Clemson University, Clemson, SC
 2016 Astronomy Seminar, Rice University, Houston, TX
 2016 Astrophysics Colloquium, JPL, CA
 2016 Star and Planet Formation Seminar, STScI, Baltimore, MD, USA
 2016 NExSS Webinar (virtual), NASA Nexus for Exoplanet System Science
 2015 Pizza Lunch Seminar, University of Amsterdam, Netherlands
 2013 Institute of Astronomy Seminar, University of Cambridge, UK
 2013 FLASH Seminar, NOAO, Tucson, AZ
 2013-2019 (7x) Origins Seminar, University of Arizona, Tucson, AZ
 2012 IPAG Colloquium, Grenoble, France
 2012 Centre for Star and Planet Formation Colloquium, Denmark, Copenhagen
 2012 Dunlap Institute for A&A Colloquium, Toronto, Canada
 2012 Astronomy Tea Talk, California Institute of Technology, Pasadena, CA
 2012 Planet and Star Formation Seminar, Berkeley, CA
 2012 Planetary Lunch Talk, Santa Cruz, CA
 2012 CASA/JILA Lunch Talk, Boulder, CO
 2012 Star Formation Meeting, Ann Arbor, MI
 2012 Radio Division Lunch Talk, Center for Astrophysics, Harvard, MA
 2012 Star Formation Seminar, Rochester, NY

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