## ÁLVARO RIBAS - CV

Research

Interests

**Positions** 

Education

Refereed

**Fellowships** 

& Awards

European Southern Observatory Phone: (+56) 2 2463 3066 Alonso de Córdova 3107, Vitacura aribas@eso.org www.alvaroribas.com Santiago, Chile Protoplanetary and debris disks, exoplanets, radiative transfer modeling, statistics, Bayesian analysis and machine learning, data visualization. ESO/ALMA FELLOW (ESO) 2018 - present POSTDOCTORAL RESEARCHER (Boston University) 2015 - 2018 HIPE ASTRONOMER ACCEPTANCE TESTER (ESAC/ESA) 2011 - 2012 ESA TRAINEE (ESAC/ESAC) 2011 Ph.D., Astrophysics 2015 Universidad Autónoma de Madrid - European Space Astronomy Centre (ESA) Supervisors: Bruno Merín & Hervé Bouy Thesis: Protoplanetary disk evolution in nearby star-forming regions M.Sc. Astrophysics 2012 Universidad Complutense de Madrid - Universidad Autónoma de Madrid B.Sc. Physics (Major: Astrophysics) 2011 Universidad Complutense de Madrid - Universidad de Salamanca As of April 2019 (see Publications List): **Publications** Main author of eight publications (including one shared main authorship) Co-author of eighteen publications ESO Fellowship (2018) ESA Traineeship (2012)

**Presentations** - ALMA Community Day Joint ALMA Observatory/Chile, 2019 - \*Summer Protoplanetary Disk Workshop 2019 ESO/Chile, 2019 - \*Spanish Astronomical Society (SEA) Salamanca/Spain, 2018 - \*Regional Star Formation Meeting 2018 BU/USA, 2018 - \*Boston Area Exoplanet Science Meeting MIT/USA, 2017

> - SMA Fellowship (invited talk) CfA/USA, 2017

> - CfA star-formation journal club (invited talk) CfA/USA, 2017

<ul> <li>*Regional Star Formation Meeting 2017</li> <li>*Star Formation 2016</li> <li>*NRAO Live! Event at Boston University</li> <li>*ALMA/Herschel Archival Workshop</li> <li>JPL Luncheon Seminar (invited talk)</li> <li>ESA Inter-Departmental Science Workshop</li> <li>ESA Summer Alumni Trainee Meeting</li> <li>ESA Summer Alumni Trainee Meeting</li> <li>*HIPE forum</li> <li>*conferences denoted with asterisk</li> </ul>	Yale/USA, 2017 Exeter/UK, 2017 BU/USA, 2016 Garching/Germany, 2015 Pasadena/USA, 2014 Aranjuez/Spain, 2013 ESAC/Spain, 2012 ESAC/Spain, 2011 Garching/Germany, 2011
AS203 Principles of Astronomy 2 Guest Lecturer (Boston University) 2018	
Mentoring: - Sarah Luettgen (Undergraduate Student, Boston - Evan Leto (Undergraduate Student, Boston Unive - Amanda Reveles (Undergraduate Student, Boston - Isabel Rebollido (ESA trainee) - Ignacio Bustamante (ESA trainee)	University) 2018 ersity) 2016 - 2017
<ul> <li>Science Referee for ApJ, A&amp;A, MNRAS</li> <li>Summer Protoplanetary Disk Workshop 2019 Member of the local organizing committee</li> <li>MA-CT Regional Star Formation Meeting Chair of the local organizing committee</li> <li>Research Experiences for Undergraduates contributes</li> <li>ESAC data analysis and statistics workshop Member of the scientific and organizing commit</li> </ul>	ESAC/Spain, 2014
<ul> <li>ALMA Astronomer on Duty (2018 - present)</li> <li>Two accepted ALMA proposals (cycle 5, priority B)</li> <li>One accepted VLA proposals (semester 2018A, priority B)</li> <li>Two accepted VISIR/VLT proposals</li> <li>Four accepted Canaricam/GTC proposals</li> <li>Observing at the Isaac Newton Telescope and William Herschel Telescope (Canary Islands)</li> <li>Observing at the Discovery Channel Telescope (Arizona, remote observing)</li> </ul>	
<ul> <li>Radio interview for Radio Infinita to discuss the first image of a black hole by the Event Horizon Telescope, 2019</li> <li>Various outreach events with the ALMA social networks.</li> <li>ESO Open House volunteer, 2018</li> </ul>	

Teaching & Research mentoring

Professional

Service

Observing Experience & Proposals

Outreach &

Media

(PI)

- Outreach talk at Escuela Particular San Juan Bautista, 2018: ALMA, the most advanced radiointerferometer in the world
- Participation in the ESO stand during the Chilean Science Week, 2018
- Space Science for Kids, Boston University, 2018
- Public Open Nights at the Observatory, Boston University
- Featured image in ESA Space Science Image of the Week (Nov 27, 2017): Star Formation in the Chamaeleon
- Owner of "Cartas desde Andrómeda" (2009-2014), an outreach blog about science, astronomy, and astrophysics with over  $60\,000$  visits.

http://cartasdesdeandromeda.blogspot.com/

#### ÁLVARO RIBAS - PUBLICATIONS

Refereed publications (main author) Long-lived Protoplanetary Disks in Multiple Systems: The VLA View of HD 98800

Á. Ribas, E. Macías, C. C. Espaillat, G. Duchêne, 2018, ApJ, 865, 77R.

FAR-INFRARED TO MILLIMETER DATA OF PROTOPLANETARYDISKS: DUST GROWTH IN THE TAURUS, OPHIUCHUS, AND CHAMAELEON I STAR-FORMING REGIONS

**Á. Ribas**, C. C. Espaillat, E. Macías, H. Bouy, S. Andrews, N. Calvet, D. A. Naylor, P, Riviere-Marichalar, M., H. D. van der Wiel, & D. Wilner, 2017, *ApJ*, 849, 63.

A SEARCH FOR LIGHT CURVE MODULATIONS AMONG KEPLER CANDIDATES: THREE SUBSTELLAR/LOW-MASS TRANSITING COMPANIONS

J. Lillo-Box,  $\acute{\bf A}$ . Ribas (shared main authorship), D. Barrado, B. Merín, & H. Bouy, 2016, A&A, 592, A32.

CONSTRAINING THE PROPERTIES OF TRANSITIONAL DISKS IN CHAMAELEON-I WITH HERSCHEL

**Á. Ribas**. H. Bouy, B. Merín, G. Duchêne, I. Rebollido, C. Espaillat, & C. Pinte, 2016, MNRAS, 458, 1029R.

PROTOPLANETARY DISK LIFETIMES AS A FUNCTION OF STELLAR MASS AND POSSIBLE IMPLICATIONS FOR GIANT PLANET POPULATIONS

Á. Ribas, H. Bouy, & B. Merín, 2015, A&A, 576, A52.

Disk evolution in the solar neighborhood. I. Disk frequencies from 1 to  $100~\mathrm{Myr}$ 

**Á. Ribas**, H. Bouy, B. Merín, & L. T. Maud, 2014, A&A, 555, A71.

IDENTIFICATION OF TRANSITIONAL DISKS IN CHAMAELEON WITH HERSCHEL

**Á. Ribas**, B. Merín, H. Bouy, C. Alves de Oliveira, D. R. Ardila, E. Puga, Á. Kóspál, L. Spezzi, N. L. J. Cox, T. Prusti, G. L. Pilbratt, Ph. André, L. Matrà, & R. Vavrek, 2013, A&A, 552, A115.

Warm debris disks candidates in transiting planets systems

**Á. Ribas**, B. Merín, D. R. Ardila, & H. Bouy, 2012, A&A, 541, A38.

# Refereed publications (co-author)

A CENSUS OF RHO-OPH CANDIDATE MEMBERS FROM GAIA DR2 H. Cánovas, C. Cantero, L. Cieza, A. Bombrun, U. Lammers, B. Merín, A. Mora, Á. Ribas, R. Ruíz-Rodríguez, 2019, A&A, in press.

### MULTIPLE RINGS IN THE TRANSITIONAL DISK OF GM AURIGAE REVEALED BY VLA AND ALMA

E. Macías, C. C. Espaillat, **Á. Ribas**, K. R. Schwarz, G. Anglada, M. Osorio, C. Carrasco-González, J. F. Gómez, C. Robinson, 2018, *ApJ*, 865, 37.

# HERSCHEL OBSERVATIONS OF PROTOPLANETARY DISKS IN LYNDS 1641 S. L. Grant, C. C. Espaillat, S. T. Megeath, N. Calvet, W. J. Fischer, C. J. Miller, K. H. Kim, A. M. Stutz, **Á. Ribas**, C. E. Robinson, 2018, *ApJS*, 863, 13.

#### An Incipient Debris Disk in the Chamaeleon I Cloud

C. C. Espaillat, **A. Ribas**, M. K. McClure, J. Hernández, J. E. Owen, N. Avish, N. Calvet, & R. Franco-Hernández, 2017, *ApJ*, 844, 60.

#### FILAMENTARY STRUCTURE AND MAGNETIC FIELD ORIENTATION IN MUSCA

N. L. J. Cox, D. Arzoumanian, Ph. André, K. L. J. Rygl, T. Prusti, A. Men'shchikov, P. Royer, Á. Kóspál, P. Palmeirim, **Á. Ribas**, V. Könyves, J.-Ph. Bernard, N. Schneider, S. Bontemps, B. Merín, R. Vavrek, C. Alves de Oliveira, P. Didelon, G. L. Pilbratt, & C. Waelkens, 2016, A&A, 590, A110.

#### X-RAY DEFICIENCY ON STRONG ACCRETING T TAURI STARS: COMPARING ORION WITH TAURUS

I. Bustamante, B. Merín, H. Bouy, C. F. Manara, Á. Ribas, & P. Riviere-Marichalar, 2016, A & A, 590, A110.

### HERSCHEL-PACS OBSERVATIONS OF DISCS IN THE ETA CHAMAELEONTIS ASSOCIATION

P. Riviere-Marichalar, P. Elliott, I. Rebollido, A. Bayo, **Á. Ribas**, B. Merín, I. Kamp, W. R. F. Dent, & B. Montesinos, 2015, A&A, 584, A22.

#### Infrared study of transitional disks in Ophiuchus with Herschel

I. Rebollido, B. Merín, **Á. Ribas**, I. Bustamante, H. Bouy, P. Riviere-Marichalar, T. Prusti, G. L. Pilbratt, Ph. André, & P. Ábrahám, 2015,  $A \mathcal{C} A$ , 581, A 30.

#### FIRST DETECTION OF THERMAL RADIOJETS IN PROTO-BROWN DWARFS CANDIDATES

Ó. Morata, A. Palau, R. F. González, I. de Gregorio-Monsalvo, **Á. Ribas**, M. Perger, H. Bouy, D. Barrado, C. Eiroa, A. Bayo, N. Huélamo, M. Morales-Calderón, & L. F. Rodríguez, 2015, *ApJ*, 807, 55.

- IDENTIFICATION OF NEW TRANSITIONAL DISK CANDIDATES IN LUPUS WITH HERSCHEL
  - I. Bustamante, B. Merín, **Á. Ribas**, H. Bouy, T. Prusti, G. L. Pilbratt, & Ph. André, 2015, A&A, 578, A23.
- Messier 35 (NGC 2168) DANCE. I. Membership, proper motions and multi-wavelength photometry
  - H. Bouy, E. Bertin, D. Barrado, L. M. Sarro, J. Olivares, E. Moraux, J. Bouvier, J.-C. Cuillandre, **Á. Ribas**, & Y. Beletsky, 2015, A&A, 575, A120.
- HERSCHEL/PACS PHOTOMETRY OF TRANSITING-PLANET HOST STARS WITH CANDIDATE WARM DEBRIS DISKS
  - B. Merín, D. R. Ardila, **Á. Ribas**, H. Bouy, G. Bryden, K. Stapelfeldt, & D. Padgett, 2014,  $A \mathcal{E} A$ , 569, A89.
- HERSCHEL'S VIEW OF THE LARGE-SCALE STRUCTURE IN THE CHAMAELEON DARK CLOUDS
  - C. Alves de Oliveira, N. Schneider, B. Merín, T. Prusti, **Á. Ribas**, N. L. J. Cox, R. Vavrek, V. Könyves, D. Arzoumanian, E. Puga, G. L. Pilbratt, Á. Kóspál, Ph. André, P. Didelon, A. Men'shchikov, P. Royer, C. Waelkens, S. Bontemps, E. Winston, & L. Spezzi, 2014, A & A, 568, A98.
- THE HERSCHEL GOULD BELT SURVEY IN CHAMAELEON II. PROPERTIES OF COLD AROUND YOUNG STELLAR OBJECTS
  - L. Spezzi, N. L. J. Cox, T. Prusti, B. Merín, **A. Ribas**, C. Alves de Oliveira, E. Winston, Á. Kóspál, P. Royer, R. Vavrek, Ph. André, G. L. Pilbratt, L. Testi, E. Bressert, L. Ricci, A. Men'shchikov, & V. Könyves, 2013,  $A \mathcal{C} A$ , 555, A71.
- A NEW HERSCHEL VIEW OF THE YOUNG STAR T54: NOT A TRANSITIONAL DISK?
  - L. Matrà, B. Merín, C. Alves de Oliveira, N. Huélamo, A. Kóspál, N. L. J. Cox, **Á. Ribas**, E. Puga, R. Vavrek, P. Royer, T. Prusti, G. L. Pilbratt, & P. André, 2012, A&A, 548, A111.
- HERSCHEL FAR-IR OBSERVATIONS OF THE CHAMAELEON MOLECULAR CLOUD COMPLEX. CHAMAELEON I: A FIRST VIEW OF YOUNG STELLAR OBJECTS IN THE CLOUD
  - E. Winston, N. L. J. Cox, T. Prusti, B. Merín, **Á. Ribas**, P. Royer, R. Vavrek, E. Puga, Ph. André, A. Men'shchikov, V. Könyves, Á. Kóspál, C. Alves de Oliveira, G. L. Pilbratt, & C. Waelkens, 2012, A&A, 545, A145.
- A SEARCH FOR PRE-SUBSTELLAR CORES AND PROTO-BROWN DWARF CANDIDATES MULTIWAVELENGTH ANALYSIS IN THE B213-L1495 CLOUDS
  - A. Palau, I. de Gregorio-Monsalvo, Ó. Morata, D. Stamatellos, N. Huélamo,
  - C. Eiroa, A. Bayo, M. Morales-Calderón, H. Bouy, Á. Ribas, D. Asmus, &
  - D. Barrado, 2013, MNRAS, 424, 2778.

# The dusty environment of HD 97300 as seen by Herschel and Spitzer

Á. Kóspál, T. Prusti, N. L. J. Cox, G. L. Pilbratt, Ph. André, C. Alves de Oliveira, E. Winston, B. Merín, **Á. Ribas**, P. Royer, R. Vavrek, & C. Waelkens, 2012, A & A, 541, A71.