

# Dr. Paola Pinilla

## PERSONAL DATA

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CURRENT EMPLOYER: Mullard Space Science Laboratory, UCL.  
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WEBPAGE: <https://www.paola-pinilla.com/>

## EDUCATION

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JUL. 2010- **Ph. D. in Astrophysics**, ITA, University of Heidelberg, Germany.  
JUL. 2013 Advisor: Prof. Dr. Cornelis P. Dullemond.  
Thesis: "Testing models of dust evolution in protoplanetary disks with millimeter observations"  
SEP. 2007- **M. Sc. in Physics**  
SEP. 2009 Universidad de los Andes, Colombia.  
JAN. 2003- **B. Sc. in Physics, academic option in Mathematics**  
SEP. 2007 Universidad de los Andes, Colombia.

## CURRENT AND PREVIOUS POSITIONS

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JUL. 2022 **Associate Professor**, MSSL/UCL, UK.  
JUN. 2019 - JUN. 2022 **Research Group Leader**, MPIA, Germany.  
NOV. 2016 - MAY. 2019 **NASA Hubble Fellow**, University of Arizona, USA.  
SEP. 2013 - OCT. 2016 **Postdoctoral Researcher**, Leiden University, The Netherlands.

## ACCEPTED REFEREED JOURNAL PUBLICATIONS

H-INDEX: 45, TOTAL CITATIONS: ~ 5720. COMPLETE LIST AT THIS URL

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<b>First Author Publications</b>	24
<b>Second/Third Author publications</b>	30
(15 from direct supervision of Ph.D. projects)	
<b>Other Co-author Publications</b>	48
<b>Total Publications (Oct 2022)</b>	102

## SELECTED GRANTS AND AWARDS

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I have obtained a total of ~5,462,195 euros, of which I have declined around 2,345,000 euros to accept other positions/offers. The rest of the money has been used for my independent research since I graduated from my PhD.

- Successful ERC Starting Grant Proposal 2023-2028 (~1,460,000 euros).
- NINS-DAAD 2020 program for International Exchange between Japan and Germany (25000 euros).
- Ludwig Biermann Award 2020 from the German Astronomical Society to the best young astronomer in Germany.
- Max Planck Research Group Grant 2020, up to 2 million euros. (*declined*)
- Accepted 2 DFG Grants within the collaboration FOR 2634 (co-applicant).
- Approved Lorentz Center Workshop 2021 (25000 euros), PIs: Giovanni Rosotti & Paola Pinilla
- Sofja Kovalevskaja Award, 2018, Alexander von Humboldt Foundation.  
One of the most valuable academic awards in Germany: up to 1.6 million euros.

- Faculty position offers (*declined*): Universidad Diego Portales, Chile (2016), University of Florida, USA (2018), and California State University Northridge, USA (2018).
- NASA Hubble Fellowship 2016.
- ESO (3 years) and CITA (5 years) fellowships 2016 (*declined*).
- NRAO Grant (10000 USD): to organize the conference “Star and Planet Formation (SPF2) in the South-West”, March 2018.
- NOVA Grant (2000 euros): to organize a Lorentz workshop, March 2015.
- Patzer Prize for one of the best publications by a young scientist at MPIA/ZAH in 2012.
- Graduate Research Fellowship, International Max Planck Research School (2010-2013), Germany.

## OBSERVATIONAL PROGRAMS

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- (co-) Principal Investigator of Accepted Proposals for: ALMA (incl. a large program >100 hours), VLT/SPHERE, PdBI.
- Co-Investigator of Accepted Proposals for JWST, ALMA, HST, PdBI, CARMA, VLT/NACO, VLT/SPHERE, VLT/CRIRES, VLT/X-SHOOTER, VLA, LBT, ATCA.

## SUPERVISION OF STUDENTS AND POST-DOCTORAL FELLOWS

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- **Post-doctoral Fellows:** Dr. Matías Gárate (MPIA, 2020-2023).
- **PhD Students:** Juanita Antilen (UCL, 2022-2026), Nicolas T. Kurtovic (MPIA, 2019-2023), Timmy Delage (MPIA, 2019-2023).
- **Master Students:** Wing Yu (UCL, 2022-2023), Jochen Stadler (MPIA, 2021), Nicola Kroon (Leiden University, 2014), Roman Tatch (Leiden University, 2014), Adriana Pohl (University of Heidelberg, 2013).
- **Bachelor Students:** Leon Marx (MPIA, 2021), Max Ackermann (MPIA, 2020).
- **Summer-internship Students:** Aoife Boyle (LEAPS Program, 2015).
- **Co-supervision PhD Students:** Kan Chen (UCL, 2021-2025), Dr. Feng Long (University of Pekin, 2019), Dr. Michael Hammer (University of Arizona, 2017-2020), Dr. Nathan Hendler (University of Arizona, 2017-2020), Dr. Giovanni Dipierro (Milan University, 2015), Dr. Maria de Juan Ovelar (Leiden University, 2014).

## TEACHING ACTIVITIES

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OCT. 2020 -FEB. 2021	Lecturer of Experimental Physics I, University of Heidelberg, Germany.
OCT. 2019 - FEB. 2020	Lecturer of the IMPRS Seminar, University of Heidelberg, Germany.
APR. 2019	Invited Lecture: Topics on Astronomical Research, University of Arizona, USA.
APR. 2017	Invited Lecture: Advanced Extra Galactic Astronomy, University of Arizona, USA.
MAR. 2017	Lecture on Planet Formation, University of Arizona, USA.
APR. 2011- AUG. 2011	Teaching Assistant (2 hours/week), Observational Astronomy, University of Heidelberg, Germany.
SEP. 2009 -MAY 2010	Part-time Lecturer (14 hours/week), Physics Classes, Universidad de los Andes, Colombia.
SEP. 2007 -SEP. 2009	Teaching Assistant (8 hours/week), Physics Classes, Universidad de los Andes, Colombia.

## ORGANIZATION OF SCIENTIFIC MEETINGS

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- SEP. 2022 Organizer and co-chair of the session "The hidden newly born planets" in EXOA – Exoplanets, Origins of Planetary Systems and Astrobiology (30 participants), Granada, Spain.
- SEP. 2021 Initiator and main organizer of the Lorentz workshop: "Planet-forming Disks: From Surveys to Answers" (80 participants), Leiden, the Netherlands.
- SEP. 2020 One of the main organizers of the IMPRS Summer School: "Planet Formation in Protoplanetary Disks" (110 participants), Heidelberg, Germany.
- JUL. 2018 SOC member of the conference "Space Studies of the Earth-Moon System, Planets, and Small Bodies of the Solar System" (100 participants), Pasadena, California, USA.
- MAR. 2018 Initiator and main organizer of the conference "Star and Planet Formation (SPF2) in the South-West" (120 participants), Biosphere 2 Center, Arizona, USA:
- MAR. 2015 Initiator and main organizer of the Lorentz workshop: "Transition Disks and Planet Formation" (50 participants), Leiden, the Netherlands.

## SCIENTIFIC TALKS

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Since 2012, I have given 87 scientific talks, including 62 *invited* talks to international institutes and conferences. Of these talks, 20 were public colloquium (one in Spanish), and 3 have been main reviews in large conferences (more than 100 participants). Here I highlight 10 of these invited talks in the last 6 years.

- FEB. 2022 Michigan Astrophysics Colloquium, USA.
- JAN. 2022 Seminar at the Institute for Advanced Studies in Basic Sciences, Iran.
- NOV. 2021 Vienna Astrophysics Colloquium, Austria
- DEC. 2020 5 Years after HLTau Conference: A new era in planet formation, Chile.
- NOV. 2019 Heidelberg Joint Astronomical Colloquium, Heidelberg, Germany.
- APR. 2019 Astronomy Colloquium, Leiden Observatory, The Netherlands.
- MAR. 2018 Physics & Astronomy Colloquium, Universite de Montreal, Canada.
- DEC. 2017 Exoplanets and Planet Formation Conference, Shanghai, China.
- JUN. 2017 Gordon Conference: Origins of the Solar Systems, USA.
- APR. 2016 Workshop Formation, Evolution, and Dynamics of Young Solar Systems, Spain.

In addition, I have given talks related to different topics of Equity, Diversity and Inclusion in Astronomy, including: [1] Impostor Syndrome Workshop (9 times), [2] Mothers in Astronomy (2 times), [3] Life-work Balance (2 times), [4] Balancing Scientific Collaborations (2 times), [5] Unconscious Bias (2 times), [6] Inclusion in Astronomy (1 time), [7] Ethics in Astrophysics (1 time), and [8] Career Paths in Astronomy (1 time).

## INSTITUTIONAL RESPONSIBILITIES

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- Member of the Department of Equity, Diversity and Inclusion at MSSL/UCL.
- Co-leader of the project "Mothers in Astronomy" book. More information [here](#).
- Member of the MPIA working group "Workplace Culture & Environment". We developed mental health awareness, work life balance and career progression for their fellow colleagues.
- Postdoc recruitment committee at MPIA (2019 and 2022) and MSSL/UCL (2022).
- PhD's recruitment committee of IMPRS 2019.

## REVIEWING ACTIVITIES

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- **Proposal Reviewer:** Panel member for the Cycle 1 Time Allocation Committee (TAC) of JWST (2020)
- **Journal Referee:** Nature, Nature Astronomy, ApJ, ApJL, A&A (papers and letters), MNRAS,

PASJ, RMxAA, Planetary and Space Science (Elsevier), and Astrophysics and Space Science (Springer). I review in average  $\sim 6$  papers/year since 2014.

- **Grants:** [1] Panelist for the Emerging Worlds Program (NASA), [2] NASA Exoplanets Research Program (XRP), [3] Natural Sciences and Engineering Research Council of Canada (NSERC), [4] National Commission for Scientific and Technological Research (CONICYT), [5] French National Research Agency, [6] Distributed Research utilizing Advanced Computing (DIRAC), [7] Future Investigators in NASA Earth and Space Science and Technology (FINESST), [8] The Stephen Hawking Fellowship, [9] National Research, Development and Innovation Office (NKFI, Hungary), [10] Science and Technology Facilities Council (STFC) - UKRI.
- **PhD thesis committee:** [1] Dr. Paolo Cazzoletti. Leiden Observatory, The Netherlands (2019). [2] Dr. Leon Trapman. Leiden Observatory, The Netherlands (2020). [3] Dr. Nathan Hendler. LPL/University of Arizona, The USA (2020). [4] Mr. Daniel Cummins. Imperial College London, UK (2022).

## CAREER BREAKS

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- JUNE 2021 Maternity Leave (6 months)
- MARCH 2020 Part-time work because of increased caring responsibility for dependent person, including home schooling of children (6 months).
- JULY 2018 Maternity Leave (6 months).

# List of Publications of Dr. Paola Pinilla

h-index: 45, total citations:  $\sim 5720$ , year of first publication: 2012

## FIRST AUTHOR PUBLICATIONS

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24. **Pinilla**, *First Steps of Planet Formation Around Very Low Mass Stars and Brown Dwarfs*, invited contribution as an article in the European Physics Journal + (accepted for publication).
23. **Pinilla**, Benisty, Kurtovic, Dong, Zhu, Andrews, Carpenter, Ginski, Huang, Isella, Pérez, Ricci, Rosotti, Villenave, Wilner; *Distributions of gas and small and large grains in the LkH $\alpha$ 330 disk trace a young planetary system*, A&A (2022), 665, A128.
22. **Pinilla**, Garufi, Gárate; *Efficient dust radial drift around young intermediate-mass stars*, A&A (2022), vol. 662, L8.
21. **Pinilla**, Kurtovic, Benisty, Manara, Natta, Sanchis, Tazzari, Stammer, Ricci, Testi; *A bright inner disk and structures in the transition disk around the very low-mass star CIDA 1*, A&A (2021), vol. 649, A122.
20. **Pinilla**, Lenz, Stammer; *Growing and Trapping Pebbles with Fragile Collisions of Particles in Protoplanetary Disks*, A&A (2021), vol. 645, A70.
19. **Pinilla**, Pascucci, Marino; *Hints on the origins of particle traps in protoplanetary disks given by the  $M_{\text{dust}} - M_{\star}$  relation*, A&A (2020) vol. 635, A105
18. **Pinilla**, Benisty, Cazzoletti, Harsono, Pérez, Tazzari; *An Inner Disk in the Large Gap of the Transition Disk SR 245*, ApJ (2019) vol. 878, 16.
17. **Pinilla**, Benisty, de Boer, Manara, Bouvier, Dominik, Ginski, Loomis, Sicilia Aguilar; *Variable Outer Disk Shadowing Around the Dipper Star RX J1604.3-2130*, ApJ (2018) vol. 868, 85.
16. **Pinilla**, Natta, Manara, Ricci, Scholz, Testi; *Resolved millimeter-dust continuum cavity around the very low mass young star CIDA 1*, A&A (2018) vol. 615, A95.
15. **Pinilla**, Tazzari, Pascucci, Youdin, Garufi, Manara, Testi, van der Plas, Barenfeld, Canovas, Cox, Hendler, Pérez, van der Marel; *Homogeneous Analysis of the Dust Morphology of Transition Disks Observed with ALMA: Investigating dust trapping and the origin of the cavities*, ApJ (2018) vol. 859, 32.
14. **Pinilla**, Quiroga-Nuñez, Benisty, Natta, Ricci, Henning, van der Plas, Birnstiel, Testi, Ward-Duong; *Millimeter spectral indices and dust trapping by planets in brown dwarf disks*, ApJ (2017) vol. 846, 70.
13. **Pinilla** and Youdin; *Particle Trapping in Protoplanetary Disks: Models vs. Observations*, in: Pessah M., Gressel O. (eds.) *Formation, Evolution, and Dynamics of Young Solar Systems*. Astrophysics and Space Science Library, vol. 445. Springer, Cham.
12. **Pinilla**, Pohl, Stammer, Birnstiel; *Dust Density Distribution and Imaging Analysis of Different Ice Lines in Protoplanetary Disks*, ApJ (2017) vol. 845, 68.
11. **Pinilla**, Pérez, Andrews, van der Marel, van Dishoeck, Ataiee, Benisty, Birnstiel, Juhász, Natta, Ricci, and Testi; *A Multi-wavelength Analysis of Dust and Gas in the SR 245 Transition Disk*, ApJ (2017) vol. 839, 99.
10. **Pinilla**, Flock, de Juan Ovelar, and Birnstiel; *Can dead zones create structures like a transition disk?*, A&A (2016) vol. 596, A81.
9. **Pinilla**, Klarmann, Birnstiel, Benisty, Dominik, and Dullemond; *A tunnel and a traffic jam: How transition disks maintain a detectable warm dust component despite the presence of a large planet-carved gap*, A&A (2016) vol. 585, A35.

8. **Pinilla**, de Boer, Benisty, Juhász, de Juan Ovelar, Dominik, Avenhaus, Birnstiel, Girard, Huelamo, Isella, and Milli; *Variability and dust filtration in the transition disk J160421.7-213028 observed in optical scattered light*, A&A (2015) vol. 584, L4.
7. **Pinilla**, van der Marel, Pérez, van Dishoeck, Andrews, Birnstiel, Herczeg, Pontoppidan, and van Kempen; *Testing particle trapping in transition disks with ALMA*, A&A (2015) vol. 584, A16.
6. **Pinilla**, Birnstiel, and Walsh; *Sequential planet formation in the HD 100546 protoplanetary disk?*, A&A (2015) vol. 580, A105.
5. **Pinilla**, de Juan Ovelar, Ataiee, Benisty, Birnstiel, van Dishoeck, and Min; *Gas and dust structures in protoplanetary disks hosting multiple planets*, A&A (2015) vol. 573, A9.
4. **Pinilla**, Benisty, Birnstiel, Ricci, Isella, Natta, Dullemond, Quiroga-Nuñez, Henning, and Testi; *Millimetre spectral indices of transition disks and their relation to the cavity radius*, A&A (2014) vol. 564, A51.
3. **Pinilla**, Birnstiel, Benisty, Ricci, Natta, Dullemond, Dominik, and Testi; *Explaining millimeter-sized particles in brown dwarf disks*, A&A (2013) vol. 554, A95.
2. **Pinilla**, Benisty, and Birnstiel; *Ring shaped dust accumulation in transition disks*, A&A (2012) vol. 545, A81.
1. **Pinilla**, Birnstiel, Ricci, Dullemond, Uribe, Testi, and Natta; *Trapping dust particles in the outer regions of protoplanetary disks*, A&A (2012) vol. 538, A114.

## SECOND AND THIRD AUTHOR PUBLICATIONS

\* STUDENT SUPERVISION

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30. \*Stadler, Gárate, **Pinilla**, Lenz, Dullemond, Birnstiel, Stammler; *The impact of dynamic pressure bumps on the observational properties of protoplanetary disks*, accepted for publication in A&A
  29. \*Kurtovic, **Pinilla**, Penzlin, Benisty, Pérez, Ginski, Isella, Kley, Menard, Pérez, Bayo; *The morphology of CS Cha circumbinary disk suggesting the existence of a Saturn-mass planet*, A&A (2022), 664, A151.
  28. Kalyaan, **Pinilla**, Krijt, Mulders, Banzatti; *Linking Outer Disk Pebble Dynamics to Inner Disk Water Enrichment*, ApJ (2021), vol. 921, 84.
  27. \*Kurtovic, **Pinilla**, Long, Benisty, Manara, Natta, Pascucci, Ricci, Scholz, Testi; *Size and Structures of Disks around Very Low Mass Stars in the Taurus Star-Forming Region*, A&A (2021), vol. 645, A139.
  26. Long, **Pinilla**, Herczeg, Andrews, Harsono, Johnstone, Regusa, Pascucci, Wilner, Hendler, Jennings, Liu, Lodato, Menard, van der Plas, Dipierro; *Dual-wavelength ALMA Observations of Dust Rings in Protoplanetary Disks*, ApJ (2020) vol. 898, 36.
  25. \*Hendler, Pascucci, **Pinilla**, Tazzari, Carpenter, Malhotra, Testi; *The evolution of dust-disk sizes from a homogeneous analysis of 1-10 Myr-old stars*, ApJ (2020) vol. 895, 126.
  24. \*Hammer, **Pinilla**, Kratter, and Lin; *Observational diagnostics of elongated planet-induced vortices with realistic planet formation timescales*, MNRAS (2019) vol. 482, 3609.
  23. \*Long, **Pinilla**, Herczeg, Harsono, Dipierro, Pascucci, Hendler, Tazzari, Ragusa, Salyk, Edwards, Lodato, van de Plas, Johnstone, Liu, Boehler, Cabrit, Manara, Menard, Mulders, Nisini, Fischer, Rigliaco, Banzatti, Avenhaus, and Gully-Santiago; *Gaps and Rings in an ALMA Survey of Disks in the Taurus Star-forming Region*, ApJ (2018) vol. 869, 17.
  22. Garufi, Benisty, **Pinilla**, Tazzari, Dominik, Ginski, Henning, Kral, Langlois, Menard, Stolker, Szulagyi, Villenave, and van der Plas; *Evolution of protoplanetary disks from their taxonomy in scattered light: spirals, rings, cavities, and shadows*, A&A (2018) vol. 620, A94.

21. \*Cazzoletti, van Dishoeck, **Pinilla**, Tazzari, Facchini, van der Marel, Benisty, Garufi, and Peréz; *Evidence for a massive dust-trapping vortex connected to spirals: a multi-wavelength analysis of the HD 135344B protoplanetary disk*, A&A (2018) vol.619, A161.
20. Bae, **Pinilla**, and Birnstiel; *Diverse protoplanetary disk morphology produced by a Jupiter-mass planet*, ApJL (2018) vol. 864, L26.
19. Facchini, **Pinilla**, van Dishoeck, and de Juan Ovelar; *Determining giant planet masses from simultaneous mm continuum and line observations in (transition) disks*, A&A (2018) vol. 612, A104.
18. \*Hendler, **Pinilla**, Pascucci, Pohl, Mulders, Henning, Dong, Clarke, Owen, and Hollenbach; *A likely planet-induced gap in the disk around T Cha*, MNRAS (2018) vol. 475, L62.
17. \*Pohl, Benisty, **Pinilla**, Ginski, de Boer, Avenhaus, Henning, Zurlo, Boccaletti, Dominik, Facchini, Fedele, Janson, Keppler, Kral, Langlois, Ligi, Maire, Menard, Pinte, Quanz, Sauvage, Sezestre, Stolker, Szulagyi, van Boekel, and van der Plas; *The circumstellar disk HD 169142: gas, dust and planets acting in concert?*, ApJ (2017) vol. 850, 52.
16. Ricci, Rome, **Pinilla**, Facchini, Birnstiel, and Testi; *VLA Observations of the Disk Around the Young Brown Dwarf 2M0444*, ApJ (2017) vol. 846, 19.
15. van der Marel, Cazzoletti, **Pinilla**, and Garufi; *Vortices and Spirals in the HD135344B Transition Disk*, ApJ (2016) vol. 832, 178.
14. Ginski, Stolker, **Pinilla**, Dominik, Boccaletti, de Boer, Benisty, Biller, Feldt, Garufi, Keller, Kenworthy, Maire, Ménard, Mesa, Milli, Min, Pinte, Quanz, van Boekel, Bonnefoy, Chauvin, Desidera, Gratton, Girard, Keppler, Kopytova, Lagrange, Langlois, Rouan, and Vigan; *Direct detection of scattered light gaps in the transitional disk around HD 97048 with VLT/SPHERE*, A&A (2016) vol. 595, A112.
13. Kama, **Pinilla**, and Heays; *Spirals in protoplanetary disks from photon travel time*, A&A (2016) vol. 593, L20.
12. \*Pohl, Kataoka, **Pinilla**, Dullemond, Henning, and Birnstiel; *Investigating dust trapping in transition disks with millimeter-wave polarization*, A&A (2016) vol. 593, A12.
11. \*de Juan Ovelar, **Pinilla**, Min, Dominik, and Birnstiel; *Constraining turbulence mixing strength in transitional discs with planets using SPHERE and ALMA*, MNRAS (2016) vol. 459, L85-L89.
10. Hogerheijde, Bekkers, **Pinilla**, Salinas, Kama, Andrews, Qi, and Wilner; *Steepening of the 820  $\mu\text{m}$  continuum surface brightness profile signals dust evolution in TW Hydrae's disk*, A&A (2016) vol. 586, A99.
9. Banzatti, **Pinilla**, Ricci, Pontoppidan, Birnstiel, and Ciesla; *Direct Imaging of the Water Snow Line at the Time of Planet Formation using Two ALMA Continuum Bands*, ApJL (2015) vol. 815, L15.
8. Birnstiel, Andrews, **Pinilla**, and Kama; *Dust Evolution Can Produce Scattered Light Gaps in Protoplanetary Disks*, ApJL (2015) vol. 813, L14.
7. \*Pohl, **Pinilla**, Benisty, Ataiee, Juhász, Dullemond, Van Boekel, and Henning; *Scattered light images of spiral arms in marginally gravitationally unstable discs with an embedded planet*, MNRAS (2015) vol. 453, 1768-1778.
6. Kama, Folsom, and **Pinilla**; *Fingerprints of giant planets in the photospheres of Herbig stars*, A&A (2015) vol. 582, L10.
5. \*van der Marel, **Pinilla**, Tobin, van Kempen, Andrews, Ricci, and Birnstiel; *A Concentration of Centimeter-sized Grains in the Ophiuchus IRS 48 Dust Trap*, ApJL (2015) vol. 810, L7.
4. \*Dipierro, **Pinilla**, Lodato, and Testi; *Dust trapping by spiral arms in gravitationally unstable protostellar discs*, MNRAS (2015) vol. 451, 974-986.

3. Walsh, Juhász, **Pinilla**, Harsono, Mathews, Dent, Hogerheijde, Birnstiel, Meeus, Nomura, Aikawa, Millar, and Sandell; *ALMA Hints at the Presence of two Companions in the Disk around HD 100546*, *ApJL* (2014) vol. 791, L6.
2. \*Ataiee, **Pinilla**, Zsom, Dullemond, Dominik, and Ghanbari; *Asymmetric transition disks: Vorticity or eccentricity?*, *A&A* (2013) vol. 553, L3.
1. Birnstiel, Dullemond, and **Pinilla**; *Lopsided dust rings in transition disks*, *A&A* (2013) vol. 550, L8.

#### OTHER CO-AUTHOR PUBLICATIONS

\* STUDENT OR POST-DOC (CO-) SUPERVISION

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48. Valegård, Ginski, Dominik, Bae, Benisty, Birnstiel, Facchini, Garufi, Hogerheijde, van Holstein, Langlois, Manara, **Pinilla**, Rab, Ribas, Waters, Williams, *Disk Evolution Study Through Imaging of Nearby Young Stars (DESTINYs): Scattered light detection of a possible disk wind in RY Tau*, accepted for publication in *A&A*.
  47. Curone, Izquierdo, Testi, Lodato, Facchini, **Pinilla**, Kurtovic, Toci, Benisty, Tazzari, Borsa, Lombardi, M. and Manara, C. F. and Sanchis, E. and Ricci, L.; *A giant planet shaping the disk around the very low-mass star CIDA 1*, *A&A* (2022), 665, A25.
  46. Bergez-Casalou, Bitsch, Kurtovic, **Pinilla**; *Constraining giant planet formation with synthetic ALMA images of the Solar System's natal protoplanetary disk*, *A&A* (2022), vol. 659, A6
  45. Huang, Ginski, Benisty, Ren, Bohn, Choquet, Öberg, Ribas, Bae, Bergin, Birnstiel, Boehler, Facchini, Harsono, Hogerheijde, Long, Manara, Ménard, **Pinilla**, Pinte, Rab, Williams, Zurlo; *Disk Evolution Study Through Imaging of Nearby Young Stars (DESTINYs): A Panchromatic View of DO Tau's Complex Kilo-au Environment*, *ApJ* (2022), vol. 930, 2.
  44. Long, Andrews, Rosotti, Harsono, **Pinilla**, Wilner, Öberg, Teague, Trapman, Tabone; *Gas Disk Sizes from CO Line Observations: A Test of Angular Momentum Evolution*, *ApJ* (2022), vol. 931, 6.
  43. Rota, Manara, Miotello, Lodato, Facchini, Koutoulaki, Herczeg, Long, Tazzari, Cabrit, Harsono, Ménard, **Pinilla**, van der Plas, Ragusa, Yen; *Observational constraints on disc sizes in protoplanetary discs in multiple systems in the Taurus region: II. Gas disc sizes*, *A&A* (2022), vol. 662, A121.
  42. \*Delage, Okuzumi, Flock, **Pinilla**, Dzyurkevich; *Steady-state accretion in magnetized protoplanetary disks*, *A&A* (2022), vol. 658, A97.
  41. \*Franceschi, Birnstiel, Henning, **Pinilla**, Semenov, Zormpas; *Mass determination of protoplanetary disks from dust evolution*, *A&A* (2022), vol. 657, A74.
  40. \*Gárate, Delage, Stadler, **Pinilla**, Birnstiel, Stammer, Picogna, Ercolano, Franz, Lenz; *Large gaps and high accretion rates in photoevaporative transition disks with a dead zone*, *A&A* (2021), vol. 655, A18.
  39. \*Ackermann, Delage, Kurtovic, Gárate, Henning, **Pinilla**; *Constraining the properties of the potential embedded planets in the disk around HD 100546*, *A&A* (2021), vol. 656, A150.
  38. Miller, Marino, Stammer, **Pinilla**, Lenz, Birnstiel, Henning; *The formation of wide exoKuiper belts from migrating dust traps*, *MNRAS* (2021), vol. 508, 5638.
  37. Benisty, Bae, Facchini, Keppler, Teague, Isella, Kurtovic, Pérez, Sierra, Andrews, Carpenter, Czekala, Dominik, Henning, **Pinilla**, Zurlo; *A Circumplanetary Disk Around PDS70c*, *ApJ* (2021), vol. 916L, 2B.
  36. \*Brown-Sevilla, Keppler, Barraza, Melon-Fuksman, Kurtovic, **Pinilla**, Feldt, Brandner, Ginski, Henning, Klahr, Asensio-Torres, Cantalloube, Garufi, van Holstein, Langlois, Ménard, Rickman, Benisty, Chauvin, Zurlo, Weber, Pavlov, Ramos, Rochat, Roelfsema; *A multi-wavelength analysis of the spiral arms in the protoplanetary disk around WaOph 6*, *A&A* (2021), 654, A35.



35. \*Asensio-Torres, Henning, Cantalloube, **Pinilla**, Mesa, Garufi, Jorquera, Gratton, Chauvin, Szulagyi, van Boekel, Dong, Marleau, Benisty, Villenave, Bergez-Casalou, Desgrange, Janson, Keppler, Langlois, Menard, Rickman, Stolker, Feldt, Fusco, Gluck, Pavlov, Ramos; *Perturbers: SPHERE detection limits to planetary-mass companions in protoplanetary disks*, A&A (2021), vol. 652, A101.
34. \*Hammer, Lin, Kratter, **Pinilla**; *Which planets trigger longer-lived vortices: low-mass or high-mass?*, MNRAS (2021), vol. 504, 3963.
33. Cieza, González-Ruilova, Hales, **Pinilla**, Ruíz-Rodríguez, Zurlo, Arce-Tord, Cánovas, Casassus, Flock, Kurtovic, Marino, Nogueira, Perez, Pérez, Price, Principe, Williams; *The Ophiuchus Disc Survey Employing ALMA (ODISEA)–III: the evolution of substructures in massive discs at 3–5 au resolution*, MNRAS (2021), vol. 501, 2934.
32. Ginski, Facchini, Huang, Benisty, Vaendel, Stapper, Dominik, Bae, Ménard, Muro-Arena, Hogerheijde, McClure, van Holstein, Birnstiel, Boehler, Bohn, Flock, Mamajek, Manara, Pinilla, Pinte, Rivas; *Disk Evolution Study Through Imaging of Nearby Young Stars (DESTINYs): Late infall causing disk misalignment and dynamic structures in SU Aur*, ApJL (2021), vol. 908, L25.
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