Tilman Birnstiel — Curriculum Vitae

Contact Information

Ludwig-Maximilians-Universität München
Universitätssternwarte
Scheinerstr. 1
81679 München
Germany

phone +49 (0) 89 2180 6973
web: www.til-birnstiel.de
email: til.birnstiel@lmu.de

Positions

Professor for Theoretical Astrophysics 02/2017 – now
at the Ludwig-Maximilians-Universität München, Germany

Postdoctoral Researcher 09/2015 – 01/2017
at the Max-Planck-Institute for Astronomy, Heidelberg, Germany
Advisor: *PD Dr. Hubert Klahr*

Research Associate 09/2015 – 08/2021
at the Harvard-Smithsonian Center for Astrophysics
Cambridge, MA, USA

Postdoctoral Fellow 01/2013 – 08/2015
at the Harvard-Smithsonian Center for Astrophysics
Cambridge, MA, USA
Advisor: *Dr. Sean M. Andrews*

Postdoctoral Researcher 07/2011 – 12/2012
at the Excellence Cluster 'Universe', Garching, Germany
and at the University Observatory, LMU, Munich, Germany
Advisor: *Prof. Dr. Barbara Ercolano*

Postdoctoral Researcher 10/2010 – 06/2011
at the Max-Planck-Institute for Astronomy, Heidelberg, Germany
Advisor: *Prof. Dr. Cornelis P. Dullemond*

Studies

Ph.D. Astronomy 09/2007–10/2010
University of Heidelberg & Max-Planck-Institute for Astronomy, Germany
Thesis: *The Evolution of Gas and Dust in Protoplanetary Accretion Disks*
Advisor: *Prof. Dr. Cornelis P. Dullemond*
Grade: *1.0, magna cum laude*

M.S. Physics 08/2006 – 08/2007
State University of New York at Albany, USA
Scholarship from the international office of the University of Würzburg
Thesis: *Bayesian Estimation of the Diffusion Tensor*
Advisor: *Prof. Dr. Kevin H. Knuth*
GPA: *4 of 4*

Graduate studies in physics 10/2005 – 07/2006
Julius-Maximilians-Universität, Würzburg, Germany

Vordiplom in physics 08/2005
Julius-Maximilians-Universität, Würzburg, Germany
Major: *physics*
Minor: *mathematics & chemistry*

Undergraduate studies 10/2003 – 09/2005
Julius-Maximilians-Universität, Würzburg, Germany

Community Service

Civilian Service 09/2002 – 09/2003
Roland Eller environmental center, Hobbach, Germany
conducted volunteering work via a "Freiwilliges Ökologisches Jahr"

Schooling

High School / Abitur 09/1993 – 08/2002
general qualification for university entrance
Hermann-Staudinger-Gymnasium
Erlenbach am Main, Germany

Elementary School 09/1989 – 08/1993
Johannes Obernburger Grundschule
Obernburg am Main, Germany

Research Interests

growth and transport of solids in protoplanetary disks; astrophysics and astrochemistry of planet formation; laboratory studies related to planet formation and optical properties of solids; structure and evolution of protoplanetary disks; radiative transfer and predicting observables of disks and planet formation; comparison to observations; meteoritics and planetary sciences; Bayesian data analysis and MCMC methods; high performance computing;

Talks

University of Bonn Physics Colloquium	Bonn, GER	01/2025
Formation of the protosolar disk & first planetesimals	Collège de France, Paris, FRA	06/2024
Invited Talk: MIAPbP Program: Habitability	MIAPbP Garching, GER	05/2024
Invited Talk	Germ. ngVLA community conf.	10/2023
Coauthor Chapter	Protostars & Planets VII	04/2023
Astrophysical Colloquium	Leicester University	05/2022
Astrophysical Software Prize 2021 Talk	German Astronom. Soc., online	09/2021
Inv. Review	Sagan Summer School, online	07/2021
Königstuhl Colloquium	Heidelberg, GER	07/2021
Inv. Colloquium	University of Bern, SWI	12/2019
Inv. Colloquium	University of Amsterdam, NLD	11/2019
Inv. talk: Accretion 2019	Ringberg Castle, GER	07/2019
Inv. talk: EWASS - PPDs: birth places of planets	Lyon, FRA	06/2019
Inv. talk: Challenges in planet formation	Faltiron Institute, NY, USA	05/2019
Inv. talk: IAUS 350 - Laboratory Astrophysics	U. of Cambridge, UK	04/2019
Inv. colloquium	U. of St. Andrews	04/2019
Inv. talk: Planet-Forming Disks	Villa Vigoni, ITA	03/2019
Inv. talk: Water during planet formation	U. of Zurich, SWI	02/2018
Physics Colloquium	U. of Duisburg, GER	11/2017
StarPlan Seminar	Copenhagen, DEN	10/2017

PPD Gathering	LANL, USA	08/2017
ICS Colloquium, Univ. Zürich	Zürich, SWI	04/2017
Munich Physics Colloquium	Munich, GER	11/2016
Königstuhl Colloquium	Heidelberg, GER	11/2016
Missing links from disks to planets	Budapest, HUN	10/2016
GER-JPN Planet Formation Conference	Ishigaki, JPN	09/2016
Multiple Faces of Interstellar Dust	MPE, Garching, GER	09/2016
Linking Exoplanet and Disk Compositions	STSci, Baltimore, USA	09/2016
Origins of Habitable Planets	Univ. of Gothenburg, SWE	05/2016
Workshop on Young Solar Systems	Sant Cugat, ESP	04/2016
Early Earth Evolution	Cologne University, GER	04/2016
Institute Seminar	Arcetri Observatory, ITA	02/2016
Institute Seminar	Bordeaux, FRA	11/2015
Inv. talk: From clouds to PPDs	Berlin, GER	10/2015
Invited Review: IAU Symposium 314	Atlanta, USA	05/2015
Astrophysics Seminar	IAS Princeton, USA	04/2015
Lorentz Workshop: Transition Disks	Leiden, NLD	03/2015
Inv. review: ISSI Beijing Workshop	Beijing, CHN	08/2014
Inv. review: 7th meeting on Cosmic Dust	Osaka, JPN	08/2014
Astrochemistry Seminar	Leiden Observatory, NLD	01/2014
Inv. colloquium	IPAG, Grenoble, FRA	01/2014
Inv. colloquium	U. at Albany, USA	09/2013
Postdoc Symposium	Harvard-Smiths. CfA, USA	10/2013
Conf: Dust Growth 2013	Heidelberg, GER	07/2013
Inv. review: From Dust to Rocks to Planets	Waiokola, HI, USA	04/2013
Seminar	LANL, Los Alamos, USA	03/2013
Star Formation Seminar	Harvard-Smiths. CfA, USA	03/2013
Excellence Cluster Science Day	Garching, GER	12/2012
Conf.: Instabilities & Structures in PPDs	Marseille, FRA	09/2012
Conf.: Planet Formation & Evolution	Munich, GER	09/2012
ESO SPF meeting	Garching, GER	05/2012
Cluster Colloquium	Universe Cluster, GER	02/2012
Inv. seminar	U. of Hawaii, Honolulu, USA	11/2011
Inv. review: Baroclinic Instability in Disks	Ringberg Castle, GER	06/2011
Inv. colloquium	USM, Munich, GER	05/2011
Group Seminar	U. of Kyoto, JPN	02/2011
Group Seminar	U. of Nagoya, JPN	02/2011
Lab Seminar	ILTS, Sapporo, JPN	02/2011
Conf.: Planet formation and evolution	U. of Göttingen, GER	02/2011
Group Seminar	MPIK, Heidelberg, GER	02/2011
Star & Planet Formation Talk	ESO, Garching, GER	01/2011
ITA Colloquium	U. of Heidelberg, GER	12/2010
Conf.: Planetary Population Synthesis	Ringberg Castle, GER	12/2010
Journal Club Talk	UMich, Ann Arbor, USA	11/2010
JILA Talk	UC Boulder, USA	11/2010
RG Lunch Talk	Harvard-Smiths. CfA, USA	11/2010
MPIA Student Workshop	Norden, GER	05/2010
PSF Seminar	MPIA, Heidelberg, GER	07/2009
DAAD Kickoff Meeting	MPIA, Heidelberg, GER	06/2009
MPIA PSF Retreat	Maulbronn, GER	10/2008
DFG Group Video Seminar	MPIA, Heidelberg, GER	08/2008
Joint Theory Seminar	MPIA, Heidelberg, GER	10/2008
MPIA PSF Retreat	Jena, GER	10/2007

Poster Contributions

224th Meeting of the AAS	Boston, USA	07/2014
Origins of Stars and their Plan. Systems	Hamilton, CAN	06/2012
Herschel's View on Star and Plan. Formation	Grenoble, FRA	03/2012
Formation of the First Solids	Kauai Island, USA	11/2011
From Circumstellar Disks to Plan. Systems	Garching, GER	11/2009
Planetesimal Formation	Cambridge, GBR	09/2009
Planet Formation and Evolution	Tübingen, GER	03/2009
New Light on Young Stars	Pasadena, USA	10/2008

Teaching & Supervision

- Supervision of postdocs:

Dr. Nicolas Kaufmann	2025 – present
Dr. Alexandros Ziampras	2024 – present
Dr. Asmita Bhandare	2023 – present
Dr. Sebastian Stammler	2018 – present
Dr. Joanna Drążkowska	2018 – 2022

- Supervision of students:

Sreejita Das (PhD)	2024 – present
Giovanni Tedeschi (PhD)	2022 – present
Luca Delussu (PhD)	2021 – 2025
Tommy Lau (PhD)	2021 – 2024
Andres Zuleta (Master's)	2024
Thomas Pfeil (PhD)	2020 – 2024
Fabian Binkert (PhD)	2020 – 2023
Giovanni Tedeschi (Master's)	2022
Sandro Paetzold (Master's)	2021 – 2022
Vignesh Vaikundaraman (Master's)	2022
Levi Walls (Master's)	2021
Anna Ivleva (Bachelor's)	2020
Matías Gárate (PhD)	2017 – 2020
Anirudh Sharma (Master's)	2019 – 2020
Andreas Bartenschlager (Bachelor's)	2019
Apostolos Zormpas (PhD)	2018 – 2022
Bernat Ferrer (Master's)	2018 – 2019
Sen Tian (Master's)	2018 – 2019
Pablo Navarro (Bachelor's)	2018

- Co-supervision of students:

Riccardo Franceschi (PhD)	2019 – 2023
Giovanni Rosotti (PhD 05/2015)	2011 – 2014
Fredrik Windmark (PhD 11/2013)	2010 – 2013
Paola Pinilla (PhD 07/2013)	2010 – 2013
Christian Lenz (Masters)	2015 – 2016
Christian Lenz (PhD)	2016 – 2020

- Teaching of Masters and Bachelors courses at LMU Munich 2012, 2017 - now
  Introduction to Scientific Programming (Bachelor's)
  Formation & Evolution of Planets in Protoplanetary Discs (Master's)
  Introduction to Radiative Transfer in Astrophysics (Master's)

Essentials of Modern Astrophysics (Master's)
Astrophysik I (Bachelor's)

- Outreach Talk at "Observatory Stuttgart" 2024
- Teacher's Education Seminar at "Fachakademie Dillingen" 2024
- Public Outreach Talk at "Deutsches Museum" 2022
- Public Outreach Talk at "Faszination Astronomie Online" 2022
- Invited Review at "Sagan Summer School" 2021
- Lectures at "Quantenphysik in der Schule" (teacher's seminar) 2019
- Lectures for Teacher Seminars, Deutsches Museum, Unitag 2019
- HGSFP Winter School Lecture: "Planet Formation", Obergurgl, AUT 2019
- Lectures for "Probestudium Physik" yearly, 2017 – present
- CAE's Teaching Excellence Workshop for Astronomy 06/2014
- Supervision of research internships at Excellence Cluster "Universe" 2012
- Physics Lab Course for Medical Students 2010
  University of Heidelberg, Germany

Grants and Awards

- Ranked as "Highly Cited Scientist" by Clarivate Analytics (2023)
- Successful ERC Consolidator Grant Proposal 2023 ($\sim$ 2 Million € funding)
- 2024 New Horizons in Physics Award, Breakthrough Foundation (100 000 €)
- Co-author of Chapter in "Protostars & Planets VII", Arizona Univ. Press, 2023
- Astrophysical Software Award 2020, German Astronomical Society (6 000 €)
- 2 accepted DFG Grants within FOR 2634/2 (2020) ($\sim$ 410k € funding)
- Accepted DFG Grant within SPP1992 (2020) ($\sim$ 210k € funding)
- Accepted MIAPP Workshop 2021 ($\sim$ 80k € funding)
- co-PI of DFG Excellence Cluster ORIGINS (EXC 2094)
- co-PI of DFG Research Unit FOR 2634/1
- Successful ERC Starting Grant Proposal 2016 ($\sim$ 1.4 Million € funding)
- A-rated ERC Starting Grant Proposal 2014
- Accepted Summer Program for Aspen Center for Physics 2018
- Co-author of Chapter in "Protostars & Planets VI", Arizona Univ. Press, 2014

Conference Organization

- SOC member of conference *Follow the Monarchs: A Journey to Explore the Cosmos at (Sub)milliarcsecond Scales with the ngVLA* (Morelia, 2024)
- SOC member of conference *From Clouds to Planet II* (Berlin, 2022)
- Main Organizer of MIAPP workshop *Gaps, Rings, Spirals, And Vortices: Structure Formation In Planet-Forming Disks* (Munich, 2021)
- Organizer of Aspen Center of Physics Workshop *Unveiling the Physics of Protoplanet Formation: Connecting Theory to Observations* (Aspen, 2018)
- SOC member of conference *Take a closer look - The innermost region of protoplanetary disks* (Garching 2018)
- SOC member of conference *Missing links from disks to planets* (Budapest 2016)
- SOC member & LOC chair of conference *Planet Formation and Evolution 2012* (∼200 participants)

Other Duties

- Co-organizer of the Munich Physics Colloquium Series (2016-present)
- Referee for A&A, MNRAS, ApJ, Nature, Icarus, NASA, ERC CoG, ERC AdG, DFG, ANR, MPG, Fullbright Commission, ALMA, and others.
- Contributor to various local media outlets (Süddeutsche Zeitung, BR2, BR5, Kaffee & Kosmos, Deutsches Museum ...)
- Organizing Committee of Königstuhl Colloquium Series at the Max-Planck-Institute for Astronomy (2016-2017)
- Organizing of RG Department Seminar Series at the Harvard-Smithsonian Center for Astrophysics (2013-2015)
- Organizer and co-organizer of several public outreach talks, guided tours, open house activities at MPIA
- Author of popular science articles in "Sterne und Weltraum" (german popular science magazine)
- Webmaster of the MPIA Planet and Star Formation department (2008-2011)

Refereed Publications

137. Zhao, Lau, **Birnstiel**, Stammler, Drążkowska: *Planetesimal formation in a pressure bump induced by infall*, arXiv e-prints (2025), arXiv:2501.17857Z

136. Ziampras, Dullemond, **Birnstiel**, Benisty, Nelson: *Spirals, rings, and vortices shaped by shadows in protoplanetary disks: from radiative hydrodynamical simulations to observable signatures*, arXiv e-prints (2024), arXiv:2410.13932

135. Zuleta, **Birnstiel**, and Teague: *Kinematical signatures: Distinguishing between warps and radial flows*, A&A (2024), vol. 692, A56.

134. Pfeil, **Birnstiel**, and Klahr: *TriPoD: Tri-Population size distributions for Dust evolution: Coagulation in vertically integrated hydrodynamic simulations of protoplanetary disks*, A&A (2024), vol. 691, A45.

133. Jorquera, Bonnefoy, Pérez, Chauvin, Aguinaga, Dougados, Julo, Demars, Andrews, Ricci, Zhu, Kurtovic, Cuello, Bai, **Birnstiel**, Dullemond, and Guzmán: *VLT/MUSE Detection of Accretion/Ejection Associated with the Close Stellar Companion in the HT Lup System*, ApJ (2024), vol. 976, 42.

132. Huang, Ansdell, **Birnstiel**, Czekala, Long, Williams, Zhang, and Zhu: *High-resolution ALMA Observations of Richly Structured Protoplanetary Disks in Orionis*, ApJ (2024), vol. 976, 132.

131. **Birnstiel**: *Dust Growth and Evolution in Protoplanetary Disks*, ARA&A (2024), vol. 62, 157.

130. Derkink, Ginski, Pinilla, Kurtovic, Kaper, de Koter, Valegård, Mamajek, Backs, Benisty, **Birnstiel**, Columba, Dominik, Garufi, Hogerheijde, van Holstein, Huang, Ménard, Rab, Ramírez-Tannus, Ribas, Williams, and Zurlo: *Disk Evolution Study Through Imaging of Nearby Young Stars (DESTINYS): PDS 111, an old T Tauri star with a young-looking disk*, A&A (2024), vol. 688, A149.

129. Lau, **Birnstiel**, Drążkowska, and Stammler: *Sequential giant planet formation initiated by disc substructure*, A&A (2024), vol. 688, A22.

128. Carvalho, Pérez, Sierra, Mellado, Hillenbrand, Andrews, Benisty, **Birnstiel**, Carpenter, Guzmán, Huang, Isella, Kurtovic, Ricci, and Wilner: *A Dust-trapping Ring in the Planet-hosting Disk of Elias 2-24*, ApJ (2024), vol. 971, 129.

127. Delussu, **Birnstiel**, Miotello, Pinilla, Rosotti, and Andrews: *Population synthesis models indicate a need for early and ubiquitous disk substructures*, A&A (2024), vol. 688, A81.

126. Pfeil, **Birnstiel**, and Klahr: *Vertical shear instability with dust evolution and consistent cooling times. On the importance of the initial dust distribution*, A&A (2024), vol. 687, L5.

125. Ginski, Garufi, Benisty, Tazaki, Dominik, Ribas, Engler, **Birnstiel**, Chauvin, Columba, Facchini, Goncharov, Hagelberg, Henning, Hogerheijde, van Holstein, Huang, Muto, Pinilla, Kanagawa, Kim, Kurtovic, Langlois, Manara, Milli, Momose, Orihara, Pawellek, Pinte, Rab, Schmidt, Snik, Wahhaj, Williams, and Zurlo: *The SPHERE view of the Chamaeleon I star-forming region. The full census of planet-forming disks with GTO and DESTINYS programs*, A&A (2024), vol. 685, A52.

124. Valegård, Ginski, Derkink, Garufi, Dominik, Ribas, Williams, Benisty, **Birnstiel**, Facchini, Columba, Hogerheijde, van Holstein, Huang, Kenworthy, Manara, Pinilla, Rab, Sulaiman, and Zurlo: *Disk Evolution Study Through Imaging of Nearby Young Stars (DESTINYS): The SPHERE view of the Orion star-forming region*, A&A (2024), vol. 685, A54.

123. Gupta, Miotello, Williams, **Birnstiel**, Kuffmeier, and Yen: *TIPSY: Trajectory of Infalling Particles in Streamers around Young stars. Dynamical analysis of the streamers around S CrA and HL Tau*, A&A (2024), vol. 683, A133.

122. Columba, Rigliaco, Gratton, Mesa, D'Orazi, Ginski, Engler, Williams, Bae, Benisty, **Birnstiel**, Delorme, Dominik, Facchini, Menard, Pinilla, Rab, Ribas, Squicciarini, van Holstein, and Zurlo: *Disk Evolution Study Through Imaging of Nearby Young Stars (DESTINYS): HD 34700 A unveils an inner ring*, A&A (2024), vol. 681, A19.

121. Pfeil, **Birnstiel**, and Klahr: *Dust Coagulation Reconciles Protoplanetary Disk Observations with the Vertical Shear Instability. I. Dust Coagulation and the VSI Dead Zone*, ApJ (2023), vol. 959, 121.

120. Gárate, **Birnstiel**, Pinilla, Andrews, Franz, Stammler, Picogna, Ercolano, Miotello, and Kurtovic: *Millimeter emission in photoevaporating disks is determined by early substructures*, A&A (2023), vol. 679, A15.

119. Binkert, Szulágyi, and **Birnstiel**: *Three-dimensional dust stirring by a giant planet embedded in a protoplanetary disc*, MNRAS (2023), vol. 523, 55.

118. Miotello, Kamp, **Birnstiel**, Cleeves, and Kataoka: *Setting the Stage for Planet Formation: Measurements and Implications of the Fundamental Disk Properties*, Protostars and Planets VII (2023), vol. 534, 501.

117. Delage, Gárate, Okuzumi, Yang, Pinilla, Flock, Stammler, and **Birnstiel**: *The impact of dust evolution on the dead zone outer edge in magnetized protoplanetary disks*, A&A (2023), vol. 674, A190.

116. Binkert and **Birnstiel**: *Carbon depletion in the early Solar system*, MNRAS (2023), vol. 520, 2055.

115. Rigliaco, Gratton, Ceppi, Ginski, Hogerheijde, Benisty, **Birnstiel**, Dima, Facchini, Garufi, Bae, Langlois, Lodato, Mamajek, Manara, Ménard, Ribas, and Zurlo: *Disk Evolution Study Through Imaging of Nearby Young Stars (DESTINYS): Characterization of the young star T CrA and its circumstellar environment*, A&A (2023), vol. 671, A82.

114. Franceschi, **Birnstiel**, Henning, and Sharma: *Constraining the turbulence and the dust disk in IM Lup: Onset of planetesimal formation*, A&A (2023), vol. 671, A125.

113. Gupta, Miotello, Manara, Williams, Facchini, Beccari, **Birnstiel**, Ginski, Hacar, Küffmeier, Testi, Tychoniec, and Yen: *Reflections on nebulae around young stars. A systematic search for late-stage infall of material onto Class II disks*, A&A (2023), vol. 670, L8.

112. Stammler, Lichtenberg, Drążkowska, and **Birnstiel**: *Leaky dust traps: How fragmentation impacts dust filtering by planets*, A&A (2023), vol. 670, L5.

111. Valegård, Ginski, Dominik, Bae, Benisty, **Birnstiel**, Facchini, Garufi, Hogerheijde, van Holstein, Langlois, Manara, Pinilla, Rab, Ribas, Waters, and Williams: *Disk Evolution Study Through Imaging of Nearby Young Stars (DESTINYS): Scattered light detection of a possible disk wind in RY Tau*, A&A (2022), vol. 668, A25.

110. Lau, Drążkowska, Stammler, **Birnstiel**, and Dullemond: *Rapid formation of massive planetary cores in a pressure bump*, A&A (2022), vol. 668, A170.

109. Stadler, Gárate, Pinilla, Lenz, Dullemond, **Birnstiel**, and Stammler: *The impact of dynamic pressure bumps on the observational properties of protoplanetary disks*, A&A (2022), vol. 668, A104.

108. Burn, Emsenhuber, Weder, Völkel, Klahr, **Birnstiel**, Ercolano, and Mordasini: *Toward a population synthesis of disks and planets. I. Evolution of dust with entrainment in winds and radiation pressure*, A&A (2022), vol. 666, A73.

107. Stammler and **Birnstiel**: *DustPy: A Python Package for Dust Evolution in Protoplanetary Disks*, ApJ (2022), vol. 935, 35.

106. Samra, Helling, and **Birnstiel**: *Mineral snowflakes on exoplanets and brown dwarfs. Coagulation and fragmentation of cloud particles with HYLANDS*, A&A (2022), vol. 663, A47.

105. Huang, Ginski, Benisty, Ren, Bohn, Choquet, Öberg, Ribas, Bae, Bergin, **Birnstiel**, Boehler, Facchini, Harsono, Hogerheijde, Long, Manara, Ménard, Pinilla, Pinte, Rab, Williams, and Zurlo: *Disk Evolution Study through Imaging of Nearby Young Stars (DESTINYS): A Panchromatic View of DO Tau's Complex Kilo-astronomical-unit Environment*, ApJ (2022), vol. 930, 171.

104. Zormpas, **Birnstiel**, Rosotti, and Andrews: *A large population study of protoplanetary disks. Explaining the millimeter size-luminosity relation with or without substructure*, A&A (2022), vol. 661, A66.

103. Franz, Picogna, Ercolano, Casassus, **Birnstiel**, Rab, and Pérez: *Dust entrainment in photoevaporative winds: Synthetic observations of transition disks*, A&A (2022), vol. 659, A90.

102. Stammler and **Birnstiel**: *Simframe: A Python Framework for Scientific Simulations*, The Journal of Open Source Software (2022), vol. 7, 3882.

101. Franz, Ercolano, Casassus, Picogna, **Birnstiel**, Pérez, Rab, and Sharma: *Dust entrainment in photoevaporative winds: Densities and imaging*, A&A (2022), vol. 657, A69.

100. Franceschi, **Birnstiel**, Henning, Pinilla, Semenov, and Zormpas: *Mass determination of protoplanetary disks from dust evolution*, A&A (2022), vol. 657, A74.

99. Miller, Marino, Stammler, Pinilla, Lenz, **Birnstiel**, and Henning: *The formation of wide exoKuiper belts from migrating dust traps*, MNRAS (2021), vol. 508, 5638.

98. Gárate, Delage, Stadler, Pinilla, **Birnstiel**, Stammler, Picogna, Ercolano, Franz, and Lenz: *Large gaps and high accretion rates in photoevaporative transition disks with a dead zone*, A&A (2021), vol. 655, A18.

97. Binkert, Szulágyi, and **Birnstiel**: *First 3D grid-based gas-dust simulations of circumstellar discs with an embedded planet*, MNRAS (2021), vol. 506, 5969.

96. Ueda, Flock, and **Birnstiel**: *Thermal Wave Instability as an Origin of Gap and Ring Structures in Protoplanetary Disks*, ApJ (2021), vol. 914, L38.

95. Drążkowska, Stammler, and **Birnstiel**: *How dust fragmentation may be beneficial to planetary growth by pebble accretion*, A&A (2021), vol. 647, A15.

94. Jorquera, Pérez, Chauvin, Benisty, Zhu, Isella, Huang, Ricci, Andrews, Zhang, Carpenter, Kurtovic, and **Birnstiel**: *A Search for Companions via Direct Imaging in the DSHARP Planet-forming Disks*, AJ (2021), vol. 161, 146.

93. Ginski, Facchini, Huang, Benisty, Vaendel, Stapper, Dominik, Bae, Ménard, Muro-Arena, Hogerheijde, McClure, van Holstein, **Birnstiel**, Boehler, Bohn, Flock, Mamajek, Manara, Pinilla, Pinte, and Ribas: *Disk Evolution Study Through Imaging of Nearby Young Stars (DESTINYS): Late Infall Causing Disk Misalignment and Dynamic Structures in SU Aur*, ApJ (2021), vol. 908, L25.

92. van der Marel, **Birnstiel**, Garufi, Ragusa, Christiaens, Price, Sallum, Muley, Francis, and Dong: *On the Diversity of Asymmetries in Gapped Protoplanetary Disks*, AJ (2021), vol. 161, 33.

91. Ginski, Ménard, Rab, Mamajek, van Holstein, Benisty, Manara, Asensio Torres, Bohn, **Birnstiel**, Delorme, Facchini, Garufi, Gratton, Hogerheijde, Huang, Kenworthy, Langlois, Pinilla, Pinte, Ribas, Rosotti, Schmidt, van den Ancker, Wahhaj, Waters, Williams, and Zurlo: *Disk Evolution Study Through Imaging of Nearby Young Stars (DESTINYS): A close low-mass companion to ET Cha*, A&A (2020), vol. 642, A119.

90. Lenz, Klahr, **Birnstiel**, Kretke, and Stammler: *Constraining the parameter space for the solar nebula. The effect of disk properties on planetesimal formation*, A&A (2020), vol. 640, A61.

89. Li, Li, Li, **Birnstiel**, Drążkowska, and Stammler: *Planet-induced Vortices with Dust Coagulation in Protoplanetary Disks*, ApJ (2020), vol. 892, L19.

88. Franz, Picogna, Ercolano, and **Birnstiel**: *Dust entrainment in photoevaporative winds: The impact of X-rays*, A&A (2020), vol. 635, A53.

87. Gárate, **Birnstiel**, Drążkowska, and Stammler: *Gas accretion damped by dust backreaction at the snow line*, A&A (2020), vol. 635, A149.

86. Huang, Andrews, Dullemond, Öberg, Qi, Zhu, **Birnstiel**, Carpenter, Isella, Macías, McClure, Pérez, Teague, Wilner, and Zhang: *A Multifrequency ALMA Characterization of Substructures in the GM Aur Protoplanetary Disk*, ApJ (2020), vol. 891, 48.

85. Laune, Li, Li, Li, Walls, **Birnstiel**, Drążkowska, and Stammler: *Ring Morphology with Dust Coagulation in Protoplanetary Disks*, ApJ (2020), vol. 889, L8.

84. Drążkowska, Li, **Birnstiel**, Stammler, and Li: *Including Dust Coagulation in Hydrodynamic Models of Protoplanetary Disks: Dust Evolution in the Vicinity of a Jupiter-mass Planet*, ApJ (2019), vol. 885, 91.

83. Stammler, Drążkowska, **Birnstiel**, Klahr, Dullemond, and Andrews: *The DSHARP Rings: Evidence of Ongoing Planetesimal Formation?*, ApJ (2019), vol. 884, L5.

82. Li, Li, Ricci, Li, **Birnstiel**, Isella, Ansdell, Yuan, Drążkowska, and Stammler: *Effects of Ringed Structures and Dust Size Growth on Millimeter Observations of Protoplanetary Disks*, ApJ (2019), vol. 878, 39.

81. Zhu, Zhang, Jiang, Kataoka, **Birnstiel**, Dullemond, Andrews, Huang, Pérez, Carpenter, Bai, Wilner, and Ricci: *One Solution to the Mass Budget Problem for Planet Formation: Optically Thick Disks with Dust Scattering*, ApJ (2019), vol. 877, L18.

80. Lenz, Klahr, and **Birnstiel**: *Planetesimal Population Synthesis: Pebble Flux-regulated Planetesimal Formation*, ApJ (2019), vol. 874, 36.

79. Gárate, **Birnstiel**, Stammler, and Günther: *The Dimming of RW Auriga: Is Dust Accretion Preceding an Outburst?*, ApJ (2019), vol. 871, 53.

78. Pérez, Benisty, Andrews, Isella, Dullemond, Huang, Kurtovic, Guzmán, Zhu, **Birnstiel**, Zhang, Carpenter, Wilner, Ricci, Bai, Weaver, and Öberg: *The Disk Substructures at High Angular Resolution Project (DSHARP). X. Multiple Rings, a Misaligned Inner Disk, and a Bright Arc in the Disk around the T Tauri star HD 143006*, ApJ (2018), vol. 869, L50.

77. Guzmán, Huang, Andrews, Isella, Pérez, Carpenter, Dullemond, Ricci, **Birnstiel**, Zhang, Zhu, Bai, Benisty, Öberg, and Wilner: *The Disk Substructures at High Angular Resolution Program (DSHARP). VIII. The Rich Ringed Substructures in the AS 209 Disk*, ApJ (2018), vol. 869, L48.

76. Huang, Andrews, Pérez, Zhu, Dullemond, Isella, Benisty, Bai, **Birnstiel**, Carpenter, Guzmán, Hughes, Öberg, Ricci, Wilner, and Zhang: *The Disk Substructures at High Angular Resolution Project (DSHARP). III. Spiral Structures in the Millimeter Continuum of the Elias 27, IM Lup, and WaOph 6 Disks*, ApJ (2018), vol. 869, L43.

75. van der Marel, Matthews, Dong, **Birnstiel**, and Isella: *Dust Growth and Dust Trapping in Protoplanetary Disks*, Science with a Next Generation Very Large Array (2018), vol. 517, 199.

74. Teague, Bae, **Birnstiel**, and Bergin: *Evidence for a Vertical Dependence on the Pressure Structure in AS 209*, ApJ (2018), vol. 868, 113.

73. Andrews, Huang, Pérez, Isella, Dullemond, Kurtovic, Guzmán, Carpenter, Wilner, Zhang, Zhu, **Birnstiel**, Bai, Benisty, Hughes, Öberg, and Ricci: *The Disk Substructures at High Angular Resolution Project (DSHARP). I. Motivation, Sample, Calibration, and Overview*, ApJ (2018), vol. 869, L41.

72. Huang, Andrews, Dullemond, Isella, Pérez, Guzmán, Öberg, Zhu, Zhang, Bai, Benisty, **Birnstiel**, Carpenter, Hughes, Ricci, Weaver, and Wilner: *The Disk Substructures at High Angular Resolution Project (DSHARP). II. Characteristics of Annular Substructures*, ApJ (2018), vol. 869, L42.

71. **Birnstiel**, Dullemond, Zhu, Andrews, Bai, Wilner, Carpenter, Huang, Isella, Benisty, Pérez, and Zhang: *The Disk Substructures at High Angular Resolution Project (DSHARP). V. Interpreting ALMA Maps of Protoplanetary Disks in Terms of a Dust Model*, ApJ (2018), vol. 869, L45.

70. Dullemond, **Birnstiel**, Huang, Kurtovic, Andrews, Guzmán, Pérez, Isella, Zhu, Benisty, Wilner, Bai, Carpenter, Zhang, and Ricci: *The Disk Substructures at High Angular Resolution Project (DSHARP). VI. Dust Trapping in Thin-ringed Protoplanetary Disks*, ApJ (2018), vol. 869, L46.

69. Zhang, Zhu, Huang, Guzmán, Andrews, **Birnstiel**, Dullemond, Carpenter, Isella, Pérez, Benisty, Wilner, Baruteau, Bai, and Ricci: *The Disk Substructures at High Angular Resolution Project (DSHARP). VII. The Planet-Disk Interactions Interpretation*, ApJ (2018), vol. 869, L47.

68. Isella, Huang, Andrews, Dullemond, **Birnstiel**, Zhang, Zhu, Guzmán, Pérez, Bai, Benisty, Carpenter, Ricci, and Wilner: *The Disk Substructures at High Angular Resolution Project (DSHARP). IX. A High-definition Study of the HD 163296 Planet-forming Disk*, ApJ (2018), vol. 869, L49.

67. Keppler, Benisty, Müller, Henning, van Boekel, Cantalloube, Ginski, van Holstein, Maire, Pohl, Samland, Avenhaus, Baudino, Boccaletti, de Boer, Bonnefoy, Chauvin, Desidera, Langlois, Lazzoni, Marleau, Mordasini, Pawellek, Stolker, Vigan, Zurlo, **Birnstiel**, Brandner, Feldt, Flock, Girard, Gratton, Hagelberg, Isella, Janson, Juhasz, Kemmer, Kral, Lagrange, Launhardt, Matter, Ménard, Milli, Mollière, Olofsson, Pérez, Pinilla, Pinte, Quanz, Schmidt, Udry, Wahhaj, Williams, Buenzli, Cudel, Dominik, Galicher, Kasper, Lannier, Mesa, Mouillet, Peretti, Perrot, Salter, Sissa, Wildi, Abe, Antichi, Augereau, Baruffolo, Baudoz, Bazzon, Beuzit, Blanchard, Brems, Buey, De Caprio, Carbillet, Carle, Cascone, Cheetham, Claudi, Costille, Delboulbé, Dohlen, Fantinel, Feautrier, Fusco, Giro, Gluck, Gry, Hubin, Hugot, Jaquet, Le Mignant, Llored, Madec, Magnard, Martinez, Maurel, Meyer, Möller-Nilsson, Moulin, Mugnier, Origné, Pavlov, Perret, Petit, Pragt, Puget, Rabou, Ramos, Rigal, Rochat, Roelfsema, Rousset, Roux, Salasnich, Sauvage, Sevin, Soenke, Stadler, Suarez, Turatto, and Weber: *Discovery of a planetary-mass companion within the gap of the transition disk around PDS 70*, A&A (2018), vol. 617, A44.

66. Teague, Henning, Guilloteau, Bergin, Semenov, Dutrey, Flock, Gorti, and **Birnstiel**: *Temperature, Mass, and Turbulence: A Spatially Resolved Multiband Non-LTE Analysis of CS in TW Hya*, ApJ (2018), vol. 864, 133.

65. Bae, Pinilla, and **Birnstiel**: *Diverse Protoplanetary Disk Morphology Produced by a Jupiter-mass Planet*, ApJ (2018), vol. 864, L26.

64. Ginski, Benisty, van Holstein, Juhász, Schmidt, Chauvin, de Boer, Wilby, Manara, Delorme, Ménard, Pinilla, **Birnstiel**, Flock, Keller, Kenworthy, Milli, Olofsson, Pérez, Snik, and Vogt: *First direct detection of a polarized companion outside a resolved circumbinary disk around CS Chamaeleonis*, A&A (2018), vol. 616, A79.

63. Günther, **Birnstiel**, Huenemoerder, Principe, Schneider, Wolk, Dubois, Logie, Rau, and Vanaverbeke: *Optical Dimming of RW Aur Associated with an Iron-rich Corona and Exceptionally High Absorbing Column Density*, AJ (2018), vol. 156, 56.

62. Tripathi, Andrews, **Birnstiel**, Chandler, Isella, Pérez, Harris, Ricci, Wilner, Carpenter, Calvet, Corder, Deller, Dullemond, Greaves, Henning, Kwon, Lazio, Linz, and Testi: *The Millimeter Continuum Size-Frequency Relationship in the UZ Tau E Disk*, ApJ (2018), vol. 861, 64.

61. Teague, Bae, Bergin, **Birnstiel**, and Foreman-Mackey: *A Kinematical Detection of Two Embedded Jupiter-mass Planets in HD 163296*, ApJ (2018), vol. 860, L12.

60. Hu, Tan, Zhu, Chatterjee, **Birnstiel**, Youdin, and Mohanty: *Inside-out Planet Formation. IV. Pebble Evolution and Planet Formation Timescales*, ApJ (2018), vol. 857, 20.

59. Huang, Andrews, Cleeves, Öberg, Wilner, Bai, **Birnstiel**, Carpenter, Hughes, Isella, Pérez, Ricci, and Zhu: *CO and Dust Properties in the TW Hya Disk from High-resolution ALMA Observations*, ApJ (2018), vol. 852, 122.

58. Ercolano, Jennings, Rosotti, and **Birnstiel**: *X-ray photoevaporation's limited success in the formation of planetesimals by the streaming instability*, MNRAS (2017), vol. 472, 4117.

57. Liu, Henning, Carrasco-González, Chandler, Linz, **Birnstiel**, van Boekel, Pérez, Flock, Testi, Rodríguez, and Galván-Madrid: *The properties of the inner disk around HL Tau: Multi-wavelength modeling of the dust emission*, A&A (2017), vol. 607, A74.

56. Pohl, Benisty, Pinilla, Ginski, de Boer, Avenhaus, Henning, Zurlo, Boccaletti, Augereau, **Birnstiel**, Dominik, Facchini, Fedele, Janson, Keppler, Kral, Langlois, Ligi, Maire, Ménard, Meyer, Pinte, Quanz, Sauvage, Sezestre, Stolker, Szulágyi, van Boekel, van der Plas, Villenave, Baruffolo, Baudoz, Le Mignant, Maurel, Ramos, and Weber: *The Circumstellar Disk HD 169142: Gas, Dust, and Planets Acting in Concert?*, ApJ (2017), vol. 850, 52.

55. Ricci, Rome, Pinilla, Facchini, **Birnstiel**, and Testi: *VLA Observations of the Disk around the Young Brown Dwarf 2MASS J044427+2512*, ApJ (2017), vol. 846, 19.

54. Pinilla, Quiroga-Nuñez, Benisty, Natta, Ricci, Henning, van der Plas, **Birnstiel**, Testi, and Ward-Duong: *Millimeter Spectral Indices and Dust Trapping By Planets in Brown Dwarf Disks*, ApJ (2017), vol. 846, 70.

53. Facchini, **Birnstiel**, Bruderer, and van Dishoeck: *Different dust and gas radial extents in protoplanetary disks: consistent models of grain growth and CO emission*, A&A (2017), vol. 605, A16.

52. Cridland, Pudritz, **Birnstiel**, Cleeves, and Bergin: *Composition of early planetary atmospheres - II. Coupled Dust and chemical evolution in protoplanetary discs*, MNRAS (2017), vol. 469, 3910.

51. Tripathi, Andrews, **Birnstiel**, and Wilner: *A millimeter Continuum Size-Luminosity Relationship for Protoplanetary Disks*, ApJ (2017), vol. 845, 44.

50. Pinilla, Pohl, Stammler, and **Birnstiel**: *Dust Density Distribution and Imaging Analysis of Different Ice Lines in Protoplanetary Disks*, ApJ (2017), vol. 845, 68.

49. Stammler, **Birnstiel**, Panić, Dullemond, and Dominik: *Redistribution of CO at the location of the CO ice line in evolving gas and dust disks*, A&A (2017), vol. 600, A140.

48. 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 24S Transition Disk*, ApJ (2017), vol. 839, 99.

47. Cridland, Pudritz, and **Birnstiel**: *Radial drift of dust in protoplanetary discs: the evolution of ice lines and dead zones*, MNRAS (2017), vol. 465, 3865.

46. Cazzoletti, Ricci, **Birnstiel**, and Lodato: *Testing dust trapping in the circumbinary disk around GG Tauri A*, A&A (2017), vol. 599, A102.

45. Teague, Semenov, Gorti, Guilloteau, Henning, **Birnstiel**, Dutrey, van Boekel, and Chapillon: *A Surface Density Perturbation in the TW Hydrae Disk at 95 au Traced by Molecular Emission*, ApJ (2017), vol. 835, 228.

44. **Birnstiel**, Fang, and Johansen: *Dust Evolution and the Formation of Planetesimals*, Space Sci. Rev. (2016), vol. 205, 41.

43. Pinilla, Flock, Ovelar, and **Birnstiel**: *Can dead zones create structures like a transition disk?*, A&A (2016), vol. 596, A81.

42. Pohl, Kataoka, Pinilla, Dullemond, Henning, and **Birnstiel**: *Investigating dust trapping in transition disks with millimeter-wave polarization*, A&A (2016), vol. 593, A12.

41. Teague, Guilloteau, Semenov, Henning, Dutrey, Piétu, **Birnstiel**, Chapillon, Hollenbach, and Gorti: *Measuring turbulence in TW Hydrae with ALMA: methods and limitations*, A&A (2016), vol. 592, A49.

40. 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.

39. Andrews, Wilner, Zhu, **Birnstiel**, Carpenter, Pérez, Bai, Öberg, Hughes, Isella, and Ricci: *Ringed Substructure and a Gap at 1 au in the Nearest Protoplanetary Disk*, ApJ (2016), vol. 820, L40.

38. Carrasco-González, Henning, Chandler, Linz, Pérez, Rodríguez, Galván-Madrid, Anglada, **Birnstiel**, van Boekel, Flock, Klahr, Macias, Menten, Osorio, Testi, Torrelles, and Zhu: *The VLA View of the HL Tau Disk: Disk Mass, Grain Evolution, and Early Planet Formation*, ApJ (2016), vol. 821, L16.

37. Guilloteau, Piétu, Chapillon, Di Folco, Dutrey, Henning, Semenov, **Birnstiel**, and Grosso: *The shadow of the Flying Saucer: A very low temperature for large dust grains*, A&A (2016), vol. 586, L1.

36. 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.

35. 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.

34. 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.

33. 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*, ApJ (2015), vol. 815, L15.

32. Piso, Öberg, **Birnstiel**, and Murray-Clay: *C/O and Snowline Locations in Protoplanetary Disks: The Effect of Radial Drift and Viscous Gas Accretion*, ApJ (2015), vol. 815, 109.

31. **Birnstiel**, Andrews, Pinilla, and Kama: *Dust Evolution Can Produce Scattered Light Gaps in Protoplanetary Disks*, ApJ (2015), vol. 813, L14.

30. van der Marel, Pinilla, Tobin, van Kempen, Andrews, Ricci, and **Birnstiel**: *A Concentration of Centimeter-sized Grains in the Ophiuchus IRS 48 Dust Trap*, ApJ (2015), vol. 810, L7.

29. Pinilla, **Birnstiel**, and Walsh: *Sequential planet formation in the HD 100546 protoplanetary disk?*, A&A (2015), vol. 580, A105.

28. Benisty, Juhasz, Boccaletti, Avenhaus, Milli, Thalmann, Dominik, Pinilla, Buenzli, Pohl, Beuzit, **Birnstiel**, de Boer, Bonnefoy, Chauvin, Christiaens, Garufi, Grady, Henning, Huelamo, Isella, Langlois, Ménard, Mouillet, Olofsson, Pantin, Pinte, and Pueyo: *Asymmetric features in the protoplanetary disk MWC 758*, A&A (2015), vol. 578, L6.

27. Sicilia-Aguilar, Roccatagliata, Getman, Rivière-Marichalar, **Birnstiel**, Merín, Fang, Henning, Eiroa, and Currie: *The Herschel/PACS view of the Cep OB2 region: Global protoplanetary disk evolution and clumpy star formation*, A&A (2015), vol. 573, A19.

26. 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.

25. 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*, ApJ (2014), vol. 791, L6.

24. Andrews, Chandler, Isella, **Birnstiel**, Rosenfeld, Wilner, Pérez, Ricci, Carpenter, Calvet, Corder, Deller, Dullemond, Greaves, Harris, Henning, Kwon, Lazio, Linz, Mundy, Sargent, Storm, and Testi: *Resolved Multifrequency Radio Observations of GG Tau*, ApJ (2014), vol. 787, 148.

23. 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.

22. **Birnstiel** and Andrews: *On the Outer Edges of Protoplanetary Dust Disks*, ApJ (2014), vol. 780, 153.

21. Testi, **Birnstiel**, Ricci, Andrews, Blum, Carpenter, Dominik, Isella, Natta, Williams, and Wilner: *Dust Evolution in Protoplanetary Disks*, PPVI (2014).

20. de Juan Ovelar, Min, Dominik, Thalmann, Pinilla, Benisty, and **Birnstiel**: *Imaging diagnostics for transitional discs*, A&A (2013), vol. 560, A111.

19. Pinilla, **Birnstiel**, Benisty, Ricci, Natta, Dullemond, Dominik, and Testi: *Explaining millimeter-sized particles in brown dwarf disks*, A&A (2013), vol. 554, A95.

18. van der Marel, van Dishoeck, Bruderer, **Birnstiel**, Pinilla, Dullemond, van Kempen, Schmalzl, Brown, Herczeg, Mathews, and Geers: *A Major Asymmetric Dust Trap in a Transition Disk*, Science (2013), vol. 340, 1199.

17. Akimkin, Zhukovska, Wiebe, Semenov, Pavlyuchenkov, Vasyunin, **Birnstiel**, and Henning: *Protoplanetary Disk Structure with Grain Evolution: The ANDES Model*, ApJ (2013), vol. 766, 8.

16. **Birnstiel**, Dullemond, and Pinilla: *Lopsided dust rings in transition disks*, A&A (2013), vol. 550, L8.

15. Pinilla, Benisty, and **Birnstiel**: *Ring shaped dust accumulation in transition disks*, A&A (2012), vol. 545, A81.

14. **Birnstiel**, Andrews, and Ercolano: *Can grain growth explain transition disks?*, A&A (2012), vol. 544, A79.

13. Windmark, **Birnstiel**, Ormel, and Dullemond: *Breaking through: The effects of a velocity distribution on barriers to dust growth*, A&A (2012), vol. 544, L16.

12. Windmark, **Birnstiel**, Güttler, Blum, Dullemond, and Henning: *Planetesimal formation by sweep-up: how the bouncing barrier can be beneficial to growth*, A&A (2012), vol. 540, A73.

11. **Birnstiel**, Klahr, and Ercolano: *A simple model for the evolution of the dust population in protoplanetary disks*, A&A (2012), vol. 539, A148.

10. Pinilla, **Birnstiel**, Ricci, Dullemond, Uribe, Testi, and Natta: *Trapping dust particles in the outer regions of protoplanetary disks*, A&A (2012), vol. 538, A114.

9. Andrews, Wilner, Hughes, Qi, Rosenfeld, Öberg, **Birnstiel**, Espaillat, Cieza, Williams, Lin, and Ho: *The TW Hya Disk at 870 μm: Comparison of CO and Dust Radial Structures*, ApJ (2012), vol. 744, 162.

8. Ricci, Testi, Williams, Mann, and **Birnstiel**: *The mm-colors of a Young Binary Disk System in the Orion Nebula Cluster*, ApJ (2011), vol. 739, L8.

7. **Birnstiel**: *The Evolution of Gas and Dust in Protoplanetary Accretion Disks*, PhD Thesis (2011).

6. Vasyunin, Wiebe, **Birnstiel**, Zhukovska, Henning, and Dullemond: *Impact of Grain Evolution on the Chemical Structure of Protoplanetary Disks*, ApJ (2011), vol. 727, 76.

5. **Birnstiel**, Ormel, and Dullemond: *Dust size distributions in coagulation/fragmentation equilibrium: numerical solutions and analytical fits*, A&A (2011), vol. 525, A11.

4. **Birnstiel**, Ricci, Trotta, Dullemond, Natta, Testi, Dominik, Henning, Ormel, and Zsom: *Testing the theory of grain growth and fragmentation by millimeter observations of protoplanetary disks*, A&A (2010), vol. 516, L14.

3. **Birnstiel**, Dullemond, and Brauer: *Gas- and dust evolution in protoplanetary disks*, A&A (2010), vol. 513, A79.

2. **Birnstiel**: *The evolution of gas and dust in protoplanetary accretion*, PhD Thesis (2010).

1. **Birnstiel**, Dullemond, and Brauer: *Dust retention in protoplanetary disks*, A&A (2009), vol. 503, L5.