

Dr. Martin Schlecker

POSTDOCTORAL RESEARCHER · EXOPLANETEER · OPEN SCIENCE ENTHUSIAST

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Education and Experience

ESO Fellow

EUROPEAN SOUTHERN OBSERVATORY

Independent research fellowship (25% observatory operations support)
Conduct trade studies for Extremely Large Telescope instrumentation

[Garching, Germany](#)

since 2025

Postdoctoral Researcher

UNIVERSITY OF ARIZONA

Study planetary habitability in the context of planet formation and exoplanet demographics
Inform next-generation exoplanet missions via statistical hypothesis testing
Contribute to a scalable solution for atmospheric CO₂ removal

[Tucson, AZ, USA](#)

2022–2025

PhD (Dr. rer. nat.) in Astronomy

MAX PLANCK INSTITUTE FOR ASTRONOMY/UNIVERSITY OF HEIDELBERG

Thesis: *The Architectures of Planetary Systems: Population Synthesis Meets Observations*
Advisors: Thomas Henning, Hubert Klahr
Fellow of the International Max Planck Research School (IMPRS) for Astronomy and Cosmic Physics

[Heidelberg, Germany](#)

2017–2021

Master of Science (MSc) in Nuclear, Particle and Astrophysics

TECHNICAL UNIVERSITY OF MUNICH

Thesis @European Southern Observatory (ESO): *Irregular Variability in Kepler Photometry*
Discovered and characterized a new exoplanet candidate

[Munich, Germany](#)

2013–2017

Bachelor of Science (BSc) in Physics

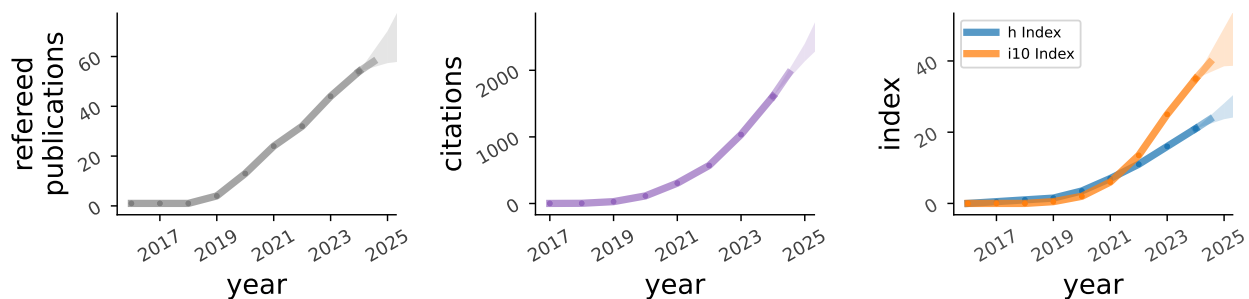
TECHNICAL UNIVERSITY OF MUNICH

Thesis @Max-Planck Institute for Extraterrestrial Physics: *Alignment and Calibration of the X-Ray Telescope μ ROS*

[Munich, Germany](#)

2010–2013

Metrics



Teaching, Leadership, and Outreach

Founder: Space Night Augsburg

Initiated science communication and charity event (>100 in-person participants)

[Augsburg](#)

since Mar. 2024

Guest lecturer: Astrobiology

Held a lecture on rocky planet habitability

[University of Arizona](#)

Apr. 2024

Popular science article: Kleine M-Sterne überraschen mit Gasriesen

Authored popular science article on giant planets around M dwarfs (in German)

[Sterne und Weltraum](#) (printed circulation: 16'000)

Aug. 2022

Guest lecturer: Introduction to Space Travel

Held a lecture on Solar System formation

[University of Applied Sciences Upper Austria Steyr](#)

Nov. 2021

Research Advisor

Designed and guided Bachelor project (Antonia Seifert, Uni Heidelberg)
Primary advisor for summer project (Dang Pham, Cornell. See *paper*)

[MPIA Heidelberg](#)

Jul. 2019 – Jul. 2021

Team Lead: EDEN Transit Survey

Coordinated a team of 14 observers; managed ~180 nights (CAHA 1.23m)

[MPIA Heidelberg/University of Arizona](#)

Jun. 2018 – Jan. 2021

Teaching Assistant: Numerical Methods Block Course

Held lectures and tutorials on numerical methods for BSc/MSc students

[Heidelberg University](#)

Feb. 2018, Feb. 2020

Author: Q&A feature

Wrote a short article about planet formation around Population III stars

[All About Space Magazine](#)

Nov. 2019

Invited Speaker: Student Information Day

Advised senior grade students on perspectives in the natural sciences

[Berufsoberschule Technik, Augsburg](#)

Apr. 2017

Team Lead: MOVE II Cubesat

Head of communications and ground control; successful launch in Dec. 2018

[Scientific Workgroup for Rocketry and Spaceflight](#)

Jan. 2011 – Apr. 2015

Tutor: Math Prep Course for Physics Students

Taught 30 first year students in mathematical concepts in physics

[Technical University of Munich](#)

Sep. 2011

Selected Presentations

Centre for Origin and Prevalence of Life Seminar

INVITED SEMINAR

[ETH Zürich](#)

Aug. 2024

Center for Integrative Planetary Science (CIPS) Seminar

INVITED SEMINAR

[UC Berkeley \(virtual\)](#)

Mar. 2024

Density Matters Ringberg Meeting

CONFERENCE TALK

[Ringberg Castle](#)

Feb. 2024

Exoplanet Team Meeting

INVITED SEMINAR

[Universitäts-Sternwarte München, LMU](#)

Feb. 2024

Stellar Coffee and Planetary Tea

INVITED SEMINAR

[ESO Garching](#)

Feb. 2024

TOP Seminar

INVITED SEMINAR

[Observatoire de la Côte d'Azur, Nice](#)

Feb. 2024

ROCKE-3D Journal Club

INVITED SEMINAR

[NASA Goddard Institute for Space Studies \(virtual\)](#)

Dec. 2023

ISM Seminar

INVITED SEMINAR

[University of Groningen](#)

Jul. 2023

Institutsseminar

INVITED COLLOQUIUM

[DLR Berlin](#)

Jul. 2023

Origins Seminar

INVITED SEMINAR

[University of Arizona](#)

May 2023

AstroBio23: Oxygen in Planetary Biospheres

CONFERENCE TALK

[Green Bank Observatory](#)

May 2023

ET Science Seminar Series

INVITED SEMINAR

[Shanghai Astronomical Observatory \(virtual\)](#)

Jan. 2023

Forming and Exploring Habitable Worlds

CONFERENCE TALK

[University of Edinburgh](#)

Nov. 2022

JPL Astrophysics Luncheon Seminar

INVITED SEMINAR

[NASA JPL \(virtual\)](#)

Apr. 2022

Königstuhl Colloquium

INVITED COLLOQUIUM

[MPIA \(virtual\)](#)

Jun. 2021

MIT Exoplanet Tea

INVITED SEMINAR

[MIT Kavli Institute \(virtual\)](#)

Nov. 2020

Exoplanet Demographics Conference

CONFERENCE TALK

NExSci, IPAC/Caltech (virtual)

Nov. 2020

CfA Stars & Planets Seminar

INVITED SEMINAR

Harvard & Smithsonian (CfA) (virtual)

Nov. 2020

Institute Colloquium

INVITED COLLOQUIUM

Tautenburg Observatory

Jun. 2019

Japanese-German Meeting on Exoplanets and Planet Formation

CONFERENCE TALK

Edesheim

Sep. 2018

Ad Valvas Seminar

INVITED SEMINAR

KU Leuven

Jul. 2018

Community Services

2025 **Reviewer for the University Research Fellowship**, The Royal Society

2023 **Speaker: “How to PhD”**, Lunch with a Steward Scientist

University of Arizona

2023 **Reviewer for a graduate research fellowship (New Frontiers Initiative)**, NSF/University of Illinois

2023 **EDEN Science Workshop: SOC+LOC**, Organized an international conference

virtual

2022 **Subject-matter expert panelist for a research program review**, NASA

since 2022 **Lead developer of the python package [arxiv-scan](#)**, personalized literature recommendations

since 2021 **Journal Referee**, A&A, AJ, ApJS

2021 **Science Data Officer for a Mars analog mission**, Austrian Space Forum

Innsbruck/Negev

2017–2021 **PhD Student Representative**, Intl. Max Planck Research School

Heidelberg

2017–2021 **Fellowship Selection Board**, Intl. Max Planck Research School

Heidelberg

2020 **Co-organized Climate Hackathon**, Scientists for Future

virtual

2019 **MPIA Half Marathon Fundraise**, Raised 2000+ EUR for rare disease research (Milly’s Mission)

Heidelberg

2019 **HGSFP Winter School: SOC+LOC**, Co-organized a winter school for 60 participants

Obergurgl

2018 **Japanese-German Meeting on Planet Formation: SOC+LOC**, Co-organized an international workshop

Edesheim

Observing Experience

Accepted PI proposal:

31 nights **2.2 m MPG/ESO telescope**

La Silla Observatory

Observations:

18 nights **1.23 m telescope**

Calar Alto Observatory

13 nights **2.2 m MPG/ESO telescope**

La Silla Observatory

12 nights **61” Kuiper telescope**

Mount Bigelow Observatory

8 nights **1.8 m Vatican Advanced Technology Telescope**

Mount Graham International Observatory

4 nights **1.22 m telescope**

Asiago Astrophysical Observatory

2 nights **1.8 m telescope**

Asiago Astrophysical Observatory

1 night **92 cm telescope**

Asiago Astrophysical Observatory

Awards

2024 **Research grant (USD 15,200)**, JWST Cycle 2 program JWST-GO-03731.009-A (PI: M. Schlecker)

Baltimore, USA

2023 **NASA PI Launchpad**, Competitive mission development program and travel grant

U Michigan, USA

2016 **Mobility grant**, TUM Physics Department

Garching, Germany

2013 **Travel Award**, TUMexchange Program

Munich/Singapore

2012 **Best Business Plan**, UnternehmerTUM Business Plan Seminar

Garching, Germany

2007 **Outstanding Performance Award**, MAN Training Center

Augsburg, Germany

2007 **Talent Promotion**, “Begabtenförderung Berufliche Bildung”, Chamber of Trade and Industry

Augsburg, Germany

Publications

refereed: **67** — first author: **6** — citations: **2108** — h-index: **26** (2025-10-31) → [ads search](#)

Lead Author

- 6 **Schlecker, M.**; Apai, D.; Affholder, A.; Ranjan, S. et al., *Bioverse: Potentially Observable Exoplanet Biosignature Patterns under the UV Threshold Hypothesis for the Origin of Life*, ApJ, 987, 24, 2025 (arXiv:2504.04261)
- 5 **Schlecker, M.**; Apai, D.; Lichtenberg, T.; Bergsten, G. et al., *Bioverse: The Habitable Zone Inner Edge Discontinuity as an Imprint of Runaway Greenhouse Climates on Exoplanet Demographics*, PSJ, 5, 3, 2024 (arXiv:2309.04518) [18 citations]
- 4 **Schlecker, M.**; Burn, R.; Sabotta, S.; Seifert, A. et al., *RV-detected planets around M dwarfs: Challenges for core accretion models*, A&A, 664, 2022 (arXiv:2205.12971) [54 citations]
- 3 **Schlecker, M.**; Pham, D.; Burn, R.; Alibert, Y. et al., *The New Generation Planetary Population Synthesis (NGPPS). V. Predetermination of planet types in global core accretion models*, A&A, 656, 2021 (arXiv:2104.11750) [53 citations]
- 2 **Schlecker, M.**; Mordasini, C.; Emsenhuber, A.; Klahr, H. et al., *The New Generation Planetary Population Synthesis (NGPPS). III. Warm super-Earths and cold Jupiters: a weak occurrence correlation, but with a strong architecture-composition link*, A&A, 656, 2021 (arXiv:2007.05563) [86 citations]
- 1 **Schlecker, M.**; Kossakowski, D.; Brahm, R.; Espinoza, N. et al., *A Highly Eccentric Warm Jupiter Orbiting TIC 237913194*, AJ, 160, 275, 2020 (arXiv:2010.03570) [33 citations]

Co-Author

- 61 Tuchow, N. W.; Stark, C. C.; Apai, D.; **Schlecker, M.** et al., *Bioverse: Assessing the Ability of Direct Imaging Surveys to Empirically Constrain the Habitable Zone via Trends in Albedo*, AJ, 170, 271, 2025 (arXiv:2509.07297)
- 60 Kaminski, A. et al., *The CARMENES search for exoplanets around M dwarfs: Occurrence rates of Earth-like planets around very low-mass stars (Corrigendum)*, A&A, 702, 2025
- 59 Emsenhuber, A. et al., *The New Generation Planetary Population Synthesis (NGPPS): VII. Statistical comparison with the HARPS/Coralie survey*, A&A, 701, 2025 (arXiv:2509.09762)
- 58 Geraldía-González, S. et al., *Discovery of a transiting hot water-world candidate orbiting Ross 176 with TESS and CARMENES*, A&A, 700, 2025 (arXiv:2507.15763)
- 57 Eberhardt, J. et al., *TOI-6695: A Pair of Near-resonant Massive Planets Observed with TESS from the WINE Survey*, AJ, 169, 298, 2025 [3 citations]
- 56 Kaminski, A. et al., *The CARMENES search for exoplanets around M dwarfs: Occurrence rates of Earth-like planets around very low-mass stars*, A&A, 696, 2025 (arXiv:2504.03364)
- 55 Hardegree-Ullman, K. K.; Apai, D.; Haffert, S. Y.; **Schlecker, M.** et al., *Bioverse: Giant Magellan Telescope and Extremely Large Telescope Direct Imaging and High-resolution Spectroscopy Assessment—Surveying Exo-Earth O₂ and Testing the Habitable Zone Oxygen Hypothesis*, AJ, 169, 171, 2025 (arXiv:2405.11423) [5 citations]
- 54 Tala Pinto, M. et al., *Three warm Jupiters orbiting TOI-6628, TOI-3837, and TOI-5027 and one sub-Saturn orbiting TOI-2328*, A&A, 694, 2025 (arXiv:2412.02069) [6 citations]
- 53 Heidari, N. et al., *Characterization of seven transiting systems, including four warm Jupiters from SOPHIE and TESS*, A&A, 694, 2025 (arXiv:2412.08527) [6 citations]
- 52 Rodríguez Martínez, R. et al., *Discovery and Characterization of an Eccentric, Warm Saturn Transiting the Solar Analog TOI-4994*, AJ, 169, 72, 2025 (arXiv:2412.02769) [2 citations]

- 51 Barnes, R. et al., *History and Habitability of the LP 890-9 Planetary System*, PSJ, 6, 25, 2025 (arXiv:2412.02743)
- 50 Vítková, M. et al., *TOI-4504: Exceptionally Large Transit Timing Variations Induced by Two Resonant Warm Gas Giants in a Three-planet System*, ApJ, 978, 2025 (arXiv:2412.05609) [5 citations]
- 49 Cesario, L. et al., *Large Interferometer For Exoplanets (LIFE): XIV. Finding terrestrial protoplanets in the galactic neighborhood*, A&A, 692, 2024 (arXiv:2410.13457) [5 citations]
- 48 Carleo, I. et al., *Mass determination of two Jupiter-sized planets orbiting slightly evolved stars: TOI-2420 b and TOI-2485 b*, A&A, 690, 2024 (arXiv:2408.05612) [2 citations]
- 47 Mallorquín, M. et al., *Revisiting the dynamical masses of the transiting planets in the young AU Mic system: Potential AU Mic b inflation at 20 Myr*, A&A, 689, 2024 (arXiv:2407.16461) [10 citations]
- 46 Gill, S. et al., *Correction to: TOI-2447 b / NGTS-29 b: a 69-day Saturn around a Solar analogue*, MNRAS, 533, 109, 2024 (arXiv:2405.07367) [6 citations]
- 45 Glauser, A. M. et al., *The Large Interferometer For Exoplanets (LIFE): a space mission for mid-infrared nulling interferometry*, SPIE, 13095, 2024 [5 citations]
- 44 Gill, S. et al., *TOI-2447 b / NGTS-29 b: a 69-day Saturn around a Solar analogue*, MNRAS, 532, 1444, 2024
- 43 Kuzuhara, M. et al., *Gliese 12 b: A Temperate Earth-sized Planet at 12 pc Ideal for Atmospheric Transmission Spectroscopy*, ApJ, 967, 2024 (arXiv:2405.14708) [16 citations]
- 42 Goffo, E. et al., *TOI-4438 b: a transiting mini-Neptune amenable to atmospheric characterization*, A&A, 685, 2024 (arXiv:2403.09833) [12 citations]
- 41 Murgas, F. et al., *Wolf 327b: A new member of the pack of ultra-short-period super-Earths around M dwarfs*, A&A, 684, 2024 (arXiv:2401.12150) [11 citations]
- 40 Jones, M. I. et al., *A long-period transiting substellar companion in the super-Jupiters to brown dwarfs mass regime and a prototypical warm-Jupiter detected by TESS*, A&A, 683, 2024 (arXiv:2401.09657) [11 citations]
- 39 Mallorquín, M. et al., *TOI-1801 b: A temperate mini-Neptune around a young M0.5 dwarf*, A&A, 680, 2023 (arXiv:2310.10244) [10 citations]
- 38 Desgrange, C. et al., *Planetary system architectures with low-mass inner planets. Direct imaging exploration of mature systems beyond 1 au*, A&A, 680, 2023 (arXiv:2310.06035) [3 citations]
- 37 Eberhardt, J. et al., *Three Warm Jupiters around Solar-analog Stars Detected with TESS*, AJ, 166, 271, 2023 (arXiv:2402.17592) [12 citations]
- 36 Hobson, M. J. et al., *TOI-199 b: A Well-characterized 100 day Transiting Warm Giant Planet with TTVs Seen from Antarctica*, AJ, 166, 201, 2023 (arXiv:2309.14915) [15 citations]
- 35 Pale, E. et al., *GJ 806 (TOI-4481): A bright nearby multi-planetary system with a transiting hot low-density super-Earth*, A&A, 678, 2023 (arXiv:2301.06873) [16 citations]
- 34 Murgas, F. et al., *Two super-Earths at the edge of the habitable zone of the nearby M dwarf TOI-2095*, A&A, 677, 2023 (arXiv:2304.09220) [19 citations]
- 33 Gupta, A. F. et al., *A High-Eccentricity Warm Jupiter Orbiting TOI-4127*, AJ, 165, 234, 2023 (arXiv:2303.14570) [11 citations]
- 32 Brahm, R. et al., *Three Long-period Transiting Giant Planets from TESS*, AJ, 165, 227, 2023 (arXiv:2304.02139) [19 citations]
- 31 Trifonov, T. et al., *TOI-2525 b and c: A Pair of Massive Warm Giant Planets with Strong Transit Timing Variations Revealed by TESS*, AJ, 165, 179, 2023 (arXiv:2302.05694) [25 citations]

- 30 Dietrich, J.; Apai, D.; **Schlecker, M.**; Hardegree-Ullman, K. K. et al., *EDEN Survey: Small Transiting Planet Detection Limits and Constraints on the Occurrence Rates of Planets around Late-M Dwarfs within 15 pc*, AJ, 165, 149, 2023 ([arXiv:2302.04138](#)) [12 citations]
- 29 Ribas, I. et al., *The CARMENES search for exoplanets around M dwarfs. Guaranteed time observations Data Release 1 (2016-2020)*, A&A, 670, 2023 ([arXiv:2302.10528](#)) [83 citations]
- 28 Kossakowski, D. et al., *The CARMENES search for exoplanets around M dwarfs. Wolf 1069 b: Earth-mass planet in the habitable zone of a nearby, very low-mass star*, A&A, 670, 2023 ([arXiv:2301.02477](#)) [31 citations]
- 27 Chaturvedi, P. et al., *TOI-1468: A system of two transiting planets, a super-Earth and a mini-Neptune, on opposite sides of the radius valley*, A&A, 666, 2022 ([arXiv:2208.10351](#)) [26 citations]
- 26 Ulmer-Moll, S. et al., *Two long-period transiting exoplanets on eccentric orbits: NGTS-20 b (TOI-5152 b) and TOI-5153 b*, A&A, 666, 2022 ([arXiv:2207.03911](#)) [25 citations]
- 25 Luque, R. et al., *The HD 260655 system: Two rocky worlds transiting a bright M dwarf at 10 pc*, A&A, 664, 2022 ([arXiv:2204.10261](#)) [30 citations]
- 24 Mollière, P. et al., *Interpreting the Atmospheric Composition of Exoplanets: Sensitivity to Planet Formation Assumptions*, ApJ, 934, 74, 2022 ([arXiv:2204.13714](#)) [144 citations]
- 23 Kemmer, J. et al., *Discovery and mass measurement of the hot, transiting, Earth-sized planet, GJ 3929 b*, A&A, 659, 2022 ([arXiv:2202.00970](#)) [21 citations]
- 22 Espinoza, N. et al., *A Transiting, Temperate Mini-Neptune Orbiting the M Dwarf TOI-1759 Unveiled by TESS*, AJ, 163, 133, 2022 ([arXiv:2202.01240](#)) [25 citations]
- 21 González-Álvarez, E. et al., *A multi-planetary system orbiting the early-M dwarf TOI-1238*, A&A, 658, 2022 ([arXiv:2111.14602](#)) [11 citations]
- 20 Kossakowski, D. et al., *TOI-1201 b: A mini-Neptune transiting a bright and moderately young M dwarf*, A&A, 656, 2021 ([arXiv:2109.09346](#)) [35 citations]
- 19 Burn, R.; **Schlecker, M.**; Mordasini, C.; Emsenhuber, A. et al., *The New Generation Planetary Population Synthesis (NGPPS). IV. Planetary systems around low-mass stars*, A&A, 656, 2021 ([arXiv:2105.04596](#)) [182 citations]
- 18 Trifonov, T. et al., *A Pair of Warm Giant Planets near the 2:1 Mean Motion Resonance around the K-dwarf Star TOI-2202*, AJ, 162, 283, 2021 ([arXiv:2108.05323](#)) [25 citations]
- 17 Sabotta, S.; **Schlecker, M.**; Chaturvedi, P.; Guenther, E. W. et al., *The CARMENES search for exoplanets around M dwarfs. Planet occurrence rates from a subsample of 71 stars*, A&A, 653, 2021 ([arXiv:2107.03802](#)) [143 citations]
- 16 Lin, C. et al., *EDEN: Flare Activity of the Nearby Exoplanet-hosting M Dwarf Wolf 359 Based on K2 and EDEN Light Curves*, AJ, 162, 11, 2021 [23 citations]
- 15 Amado, P. J. et al., *The CARMENES search for exoplanets around M dwarfs. Two terrestrial planets orbiting G 264-012 and one terrestrial planet orbiting Gl 393*, A&A, 650, 2021 ([arXiv:2105.13785](#)) [25 citations]
- 14 Hobson, M. J. et al., *A Transiting Warm Giant Planet around the Young Active Star TOI-201*, AJ, 161, 235, 2021 ([arXiv:2103.02685](#)) [44 citations]
- 13 Addison, B. C. et al., *TOI-257b (HD 19916b): a warm sub-saturn orbiting an evolved F-type star*, MNRAS, 502, 3704, 2021 ([arXiv:2001.07345](#)) [50 citations]
- 12 Dreizler, S. et al., *The CARMENES search for exoplanets around M dwarfs. LP 714-47 b (TOI 442.01): populating the Neptune desert*, A&A, 644, 2020 ([arXiv:2011.01716](#)) [40 citations]

- 11 Stock, S. et al., *The CARMENES search for exoplanets around M dwarfs. Three temperate-to-warm super-Earths*, A&A, 643, 2020 ([arXiv:2010.00474](#)) [48 citations]
- 10 Brahm, R. et al., *TOI-481 b and TOI-892 b: Two Long-period Hot Jupiters from the Transiting Exoplanet Survey Satellite*, AJ, 160, 235, 2020 ([arXiv:2009.08881](#)) [39 citations]
- 9 Kemmer, J. et al., *Discovery of a hot, transiting, Earth-sized planet and a second temperate, non-transiting planet around the M4 dwarf GJ 3473 (TOI-488)*, A&A, 642, 2020 ([arXiv:2009.10432](#)) [39 citations]
- 8 Nowak, G. et al., *The CARMENES search for exoplanets around M dwarfs. Two planets on opposite sides of the radius gap transiting the nearby M dwarf LTT 3780*, A&A, 642, 2020 ([arXiv:2003.01140](#)) [71 citations]
- 7 Jahnke, K. et al., *An astronomical institute's perspective on meeting the challenges of the climate crisis*, Nature Astronomy, 4, 812, 2020 ([arXiv:2009.11307](#)) [35 citations]
- 6 Bluhm, P. et al., *Precise mass and radius of a transiting super-Earth planet orbiting the M dwarf TOI-1235: a planet in the radius gap?*, A&A, 639, 2020 ([arXiv:2004.06218](#)) [45 citations]
- 5 Gibbs, A. et al., *EDEN: Sensitivity Analysis and Transiting Planet Detection Limits for Nearby Late Red Dwarfs*, AJ, 159, 169, 2020 ([arXiv:2002.10017](#)) [26 citations]
- 4 Espinoza, N. et al., *HD 213885b: a transiting 1-d-period super-Earth with an Earth-like composition around a bright ($V = 7.9$) star unveiled by TESS*, MNRAS, 491, 2982, 2020 ([arXiv:1903.07694](#)) [62 citations]
- 3 Kossakowski, D. et al., *TOI-150b and TOI-163b: two transiting hot Jupiters, one eccentric and one inflated, revealed by TESS near and at the edge of the JWST CVZ*, MNRAS, 490, 1094, 2019 ([arXiv:1906.09866](#)) [28 citations]
- 2 Morales, J. C. et al., *A giant exoplanet orbiting a very-low-mass star challenges planet formation models*, Science, 365, 1441, 2019 ([arXiv:1909.12174](#)) [122 citations]
- 1 Luque, R. et al., *Planetary system around the nearby M dwarf GJ 357 including a transiting, hot, Earth-sized planet optimal for atmospheric characterization*, A&A, 628, 2019 ([arXiv:1904.12818](#)) [130 citations]

Preprints & Other

- 7 Ulmer-Moll, S. et al., *Detection and characterisation of a 106-day transiting Jupiter : TOI-2449 b / NGTS-36 b*, ArXiv, 2025 ([arXiv:2509.15424](#))
- 6 Ranjan, S.; Adams, D.; Wong, M.; **Schlecker, M.** et al., *Prebiosignatures with the Habitable Worlds Observatory (HWO)*, ArXiv, 2025 ([arXiv:2507.00165](#))
- 5 Ranjan, S.; **Schlecker, M.**; Wogan, N.; Wong, M., *Testing Origin-of-Life Theories with the Habitable Worlds Observatory (HWO)*, ArXiv, 2025 ([arXiv:2507.00164](#))
- 4 **Schlecker, M.**, *The architectures of planetary systems: Population synthesis meets observations*, Ph.D. Thesis, 2021
- 3 **Schlecker, M.**, *lcps: Light curve pre-selection*, Astrophysics Source Code Library, 2018
- 2 **Schlecker, M.**, *Irregular Variability in Kepler Photometry*, Master's Thesis, 2016 [3 citations]
- 1 Tiedemann, L. et al., *The development of the μ ROS X-ray telescope*, SPIE, 8859, 885905, 2013