

# Laura Kreidberg

E-mail: kreidberg@mpia.de  
<http://www.mpia.de/en/apex>

Curriculum vitae (April 23, 2024)

## Appointments

Director, APEX Department, Max Planck Institute for Astronomy	2020 - present
Honorary Professor, Heidelberg University	2023 - present
Honorary Professor, Leiden University	2022 - present
Clay Fellow, Harvard-Smithsonian Center for Astrophysics	2019 - 2020
Junior Fellow, Society of Fellows, Harvard University	2016 - 2019
ITC Fellow, Harvard University	2016 - 2019

## Education

University of Chicago, Ph.D. Astronomy and Astrophysics	2016
Yale University, B.S. Physics and Astronomy, with distinction	2011

## Selected Awards

Annie Jump Cannon Award, American Astronomical Society	2021
Paul Hertelendy (pH) Lecturer, Harvard-Smithsonian Center for Astrophysics	2018
International Astronomical Union Division F PhD Prize	2017
William Rainey Harper Dissertation Fellowship, University of Chicago	2015
Peter B. Wagner Memorial Award for Women in Atmospheric Sciences	2015
National Science Foundation Graduate Research Fellowship	2013 - 2016
George Beckwith Prize for excellence in astronomy, Yale Astronomy Department	2011

## Collaboration Leadership Roles

Founding Director of the MPIA APEX Department, responsibilities include: <ul style="list-style-type: none"><li>shaping the scientific direction and research goals of a new department</li><li>hiring 5 permanent research staff members and 15 junior scientists</li></ul>	2020 - present
Principal Investigator for observing programs on <i>JWST</i> , <i>Hubble</i> , and <i>Spitzer</i>	2014 - present
Steering Committee and Science Team member, ELT/ANDES instrument	2021 - present
Science Team member and exoplanet science case co-lead, ELT/METIS	2020 - present
Co-Investigator for the VLT/GRAVITY+ instrument upgrade	2020 - present

## Selected Service Activities

Science Organizing Committee for multiple conferences, including Exoplanets, Exoclimes, Two HoRSeS, Sagan Summer Workshop	2018 - present
Member, STScI Strategy Committees (constituted by the STScI director)	2018, 2023
Panel member and reviewer for JWST, Hubble, Spitzer observing proposals	2018 - present
Reviewer for funding proposals, including NASA XRP, NESSF Fellowship, ERC Consolidator Grants	2016 - present
Referee for ApJ, AJ, ApJL, MNRAS, Nature, Nature Astronomy	2015 - present
Member, TESS Atmosphere Characterization Working Group	2018 - 2022

## Advising

Current advisor to Sebastian Zieba (graduate student), Kim Angelique Kahle (graduate student), and Lorena Acuna (postdoctoral researcher)

Past advisor to graduate students on independent research projects (Hannah Diamond-Lowe, Tom Loudon, George McDonald, and Lily Zhao) and postdocs (Jason Dittmann, Maria Steinrueck)

## Talks and Outreach

over 50 invited seminars and colloquia since 2015

frequent public speaker, including the Oxford Hintze Lecture (2023), American Museum of Natural History Frontiers Lecture (2020), Radcliffe Symposium: “The Undiscovered” (2018)

## Representative Publications

refereed: 129 / first author: 14 / citations: 10069 / h-index: 55 (2024-04-23)

- 23 Zieba, Sebastian; **Kreidberg, Laura**; Ducrot, Elsa; Gillon, Michaël; *et al.*, 2023, *No thick carbon dioxide atmosphere on the rocky exoplanet TRAPPIST-1 c*, *Nature*, **620**, 746 (arXiv:2306.10150) [34 citations]
- 2 **Kreidberg, Laura**; Koll, Daniel D. B.; Morley, Caroline; Hu, Renyu; *et al.*, 2019, *Absence of a thick atmosphere on the terrestrial exoplanet LHS 3844b*, *Nature*, **573**, 87 (arXiv:1908.06834) [143 citations]
- 3 Wordsworth, Robin; & **Kreidberg, Laura**, 2022, *Atmospheres of Rocky Exoplanets*, *Annual Review of Astronomy and Astrophysics*, **60**, 159 (arXiv:2112.04663) [44 citations]
- 4 **Kreidberg, Laura**; Line, Michael R.; Parmentier, Vivien; Stevenson, Kevin B.; *et al.*, 2018, *Global Climate and Atmospheric Composition of the Ultra-hot Jupiter WASP-103b from HST and Spitzer Phase Curve Observations*, *AJ*, **156**, 17 (arXiv:1805.00029) [170 citations]
- 5 **Kreidberg, Laura**; Bean, Jacob L.; Désert, Jean-Michel; Benneke, Björn; *et al.*, 2014, *Clouds in the atmosphere of the super-Earth exoplanet GJ1214b*, *Nature*, **505**, 69 (arXiv:1401.0022) [701 citations]