Ben Cassese

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Education

Ph.D. (in progress), Astronomy, Columbia University 2021-
M.Phil. (in progress), Astronomy, Columbia University 2021-
M.A. (in progress), Astronomy, Columbia University 2021-
B.S. Planetary Science and History, California Institute of Technology 2016-2020
History Thesis: *No Special Genius: Modern Federal Litigation of Partisan Gerrymandering*

Publications

As First Author:

1. (In review) **Cassese, B.** & Kipping, D. (2022) "Kepler-1708 b-i is likely undetectable with HST", *Monthly Notices of the Royal Astronomical Society*, XXX, XXX

Conference Talks

Cassese, B. & Kipping, D. (2022), "Detectability of Galilean Moon Analogs with JWST", Exoplanets IV, Las Vegas, NV, 105.01
Cassese, B. & Stevenson, D. (2018) "Feasibility of in-situ water production during fast-accreting super-earth formation", 50th AAS DPS Meeting, Knoxville, TN, 101.01

Awards

Fritz B. Burns Prize, Division of Geological and Planetary Sciences, Caltech 2019
Beckman Political Science Award, California Institute of Technology 2019
Perpall Speaking Competition Winner, California Institute of Technology 2019
Gee Family Poster Competition Winner, California Institute of Technology 2018
George W. Housner Student Discovery Fund, California Institute of Technology 2018
Perpall Speaking Competition Finalist, California Institute of Technology 2018

Teaching

As Instructor:
ASTR 1904: Astronomy Lab II, Columbia Fall 2022

As Teaching Assistant:
ASTR 1610: Theories of the Universe, from Babylon to Big Bang, Columbia Spring 2022
ASTR 1404: Stars, Galaxies, and Cosmology, Columbia Fall 2021
Ge/Ay 103: Introduction to Planetary Science, Caltech (4.89/5 review) Spring 2020
Ge 1: Earth and Environment, Caltech (4.9/5 review) Spring 2018

Training:
Teaching Development Program Foundational Track 2021-2022
Columbia Center for Teaching and Learning

Telescope Time

As PI:
MDM Hiltner 2.4m Telescope:
Cassese, B. 2022b, "Attempted Recovery of a Distant Trans-Neptunian Object", 5 nights

As Co-I:
MDM McGraw-Hill 1.3m Telescope:
Yahalomi, D., **Cassese, B.**, Sayeed, M., Hattori, & S. 2022b, "Photometric Confirmation and Ephemeris Refinement of TESS Planet Candidates", 5 nights

CHEOPS Mission:
Edwards, B., **Cassese, B.**, & 3 others. 2022 DDT, "Catching the Transit of a Long Period Planet to Support Future Atmospheric Characterization", 14 orbits

Professional Engagement

Author, Astrobites Collaboration 2022-2024
Lloyd V. Berkner Space Policy Intern, National Academy of Science 2019
Staff member on the Astro2020 Decadal Survey
AAS Division of Planetary Science Federal Relations Subcommittee, Undergraduate Member 2018-2020

Science Communication

With Astrobites:
Star light, lamp bright (5/2022)
Teamwork Across Timezones: The Transit of TOI-2180 b (4/2022)
The bigger they are, the smaller their moons? (2/2022)

Outreach

Mentor, Independent Inquiry Project, Inspired Teaching Demonstration School 2021-2022
Mentored an 8th grade project on exoplanets

Other Presentations

At Home Institution:
Columbia Astro "Friends of the Department" Meeting, Columbia Astronomy Dept. Jun. 2022
Pizza Lunch, Columbia Astronomy Dept. Nov. 2021
Small Council Donors Meeting, Cool Worlds Lab Nov. 2021

At Other Institutions:
GothamFest, Flatiron Institute Center for Computational Astrophysics Dec. 2021