

Dillon Brout

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Assistant Professor
Departments of Astronomy and Physics
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Appointments

Assistant Professor, Departments of Astronomy and Physics, Boston University 2023-

Postdoctoral Fellow, Department of Astronomy, Harvard University 2023

NASA Einstein Fellow, Harvard & Smithsonian Astrophysical Observatory, 2020-2022

NASA Einstein Fellow, University of Pennsylvania, 2019-2020

Education

Ph.D., Physics and Astronomy, University of Pennsylvania, 2019

M.S., Physics and Astronomy, University of Pennsylvania, 2015

B.S., Physics and Astronomy, Johns Hopkins University, 2013

Awards and Fellowships

2023 AAS Fred Kavli Prize (*main recipient Daniel Scolnic*)

Awarded for Pantheon+SH0ES Results

2019-2022 NASA Einstein Fellow

2016 Fermilab Universities Research Fellowship (\$10,000)

2016 PennApps Hackathon 3rd Place Winner

2012 Provost Undergraduate Research Award

2009-2013 Double Degree Abrams Scholar (Jazz Saxophone @ Peabody Institute)

Publication Summary

94 refereed journal articles with more than 17,000 citations (NASA ADS); h-index: 48

Web link: <https://ui.adsabs.harvard.edu/public-libraries/yud-a9iARz6UFPHFriHhKw>

Teaching

AS203 Stars and Galaxies, BU, Undergraduate, Spring 2024

AS109 Cosmology for Non-Science Majors, BU, Undergraduate, Fall 2023

Introduction to Data Science and Machine Learning Bootcamp, UPenn, Summer 2019,

Graduate students in Arts & Sciences, Developed material & lead instructor

Python Fundamentals for Research in Physics & Astronomy, UPenn,

Undergraduate & Graduate, 2017-2019

ML for March Madness Guest Lecture, Duke, Undergraduate 2017, 2018, 2019, 2024

Professional and Departmental Activities

Referee for:

The Astrophysical Journal, The Astrophysical Journal Letters, Monthly Notices of the Royal Astronomical Society, Physical Review Letters

Proposal reviewer/TAC for:

NSF NOIRLab, Hubble Space Telescope TAC

Co-Editor and Co-Author of Springer Series Book : The Hubble Constant Tension 2024

Conference Organizer - "The Impact of Dust on Future Cosmological Probes"

25 attendees, 3 days, @ Harvard Smithsonian CfA 2022

Organizing Committee - "The Freedom Trail of Code: Boston Astrophysics x Machine

Learning Hackathon", 70+ attendees, 3 days, @ MIT IAIFI, 2024

Collaboration Leadership

LSST DESC Time Domain Cosmology Working Group Co-Convener 2023 -

DESI Time Domain and Low Redshift Cosmology Working Group Co-Chair 2022 -

DES Supernova 5-Year Cosmology Analysis Co-Coordinator 2021 -

SH0ES Hubble Constant Analysis SN Ia Lead 2020 -

Pantheon+ Collaboration Co-Founder/Lead 2020 -

Grants and Proposals Awarded

Funded co-I NASA Roman Project Infrastructure Team 2024 (\$345,525)

Co-PI : Templeton Foundation Grant 2023-2025 (\$201,529)

PI : DEBASS, NOAO Blanco/DECam telescope time - 9 Nights, 2023-2024

PI : DEBASS, NOAO Blanco/DECam telescope time - 30 Nights, 2020-2023

2019-2022 NASA Einstein Fellowship (\$258,000)

Invited Lectures and Colloquia

Opening Talk of the 15th International Workshop on Identification of Dark Matter,

L'Aquila, IT, 2024

Recontres de Moriond, Cosmology, *La Thuile IT, 2024*

Colloquium - Center for Astrophysics, Harvard & Smithsonian, *Cambridge MA, 2024*

Fermilab Joint Experimental-Theoretical Physics Seminar, *Batavia, Illinois, 2023*

Cosmoverse, *Lisbon, Portugal, 2023*

Progress on Old and New Themes in Cosmology, *Avignon, France, 2023*

Dark Energy Science Collaboration, *Remote, 2023*

Colloquium - Boston University, *Boston, MA, 2023*

Colloquium - SLAC, *Palo Alto, CA, 2023*

KIPAC Tea Talk - Stanford, *Palo Alto, CA, 2023*

Colloquium - Northeastern University, *Boston, MA, 2023*

CosmoVerse, *Remote, 2022*

Colloquium, University of Michigan Physics, *Ann Arbor, MI, 2022*

Boom! Conference, *UI Champaign Urbana, 2022*

DES-ZTF Workshop, *Stockholm, Sweden, 2022*
DES Workshop, *Madrid, Spain, 2022*
Colloquium - ICTP-SAIFR, *Sao Paulo, Brazil, 2022*
CfA ITC Luncheon, *Cambridge, MA, 2022*
KIPAC Tea Talk - *Stanford, Palo Alto, CA, 2022*
Colloquium - *SLAC, Palo Alto, CA, 2022*
Colloquium - *University of Helsinki, Finland, 2022*
Cosmology Talks with Shaun Hotchkiss, *Youtube, 2021*
Colloquium - University of Hawaii, *Honolulu, HI, 2021*
LSST DESC Collaboration Meeting, *Remote, 2021*
AAS LSST Special Session, *Remote, 2021*
Colloquium - Stockholm University, *Remote, 2020*
World Summit, *Guadeloupe Islands, 2020*
Colloquium - Brandeis Univ., *Waltham, MA, 2020*
Press Event for Pixel - GOOGLE, *New York, NY, 2019*
KICP SCAM Workshop UChicago, *Chicago, IL, 2019*
KITP Tensions between the Early and the Late Universe, *Santa Barbara, CA, 2019*
CMU/Pitt Physics Seminar, *Pittsburgh, PA, 2019*
Colloquium - Universite Clermont-Auvergne, *FR, 2019*
Colloquium - Service de Physique Théorique, ULB, *Brussels, Belgium, 2019*
Colloquium - American Museum of Natural History, *New York, NY, 2019*
Colloquium - Johns Hopkins/STSci, *Baltimore, MD, 2019*
South American Workshop on Cosmology in the LSST Era, *Sao Paulo, Brazil, 2018*
DECam Community Science Workshop (2 Talks), *Tucson, AZ, 2018*
Fermilab Joint Experimental-Theoretical Physics Seminar, *Batavia, IL, 2018*