

CONTACT INFORMATION	Department of Physics University of Texas at Austin 2515 Speedway, Austin, TX 78712	E-mail: ngalitzki@utexas.edu WWW: www.ngalitzki.com
RESEARCH INTERESTS	Experimental cosmology, astrophysical instrumentation, data analysis, polarimetry, cosmic microwave background, interstellar medium, dust, cryogenics, balloon-borne telescopes	
EDUCATION	The University of Pennsylvania , Philadelphia, PA Ph.D., Physics and Astronomy	Aug. 2016
	<ul style="list-style-type: none"> • <i>Magnetic Fields in Molecular Clouds: The BLASTPol¹ and BLAST-TNG² Experiments</i> • Adviser: Prof. Mark Devlin 	
	California Institute of Technology , Pasadena, CA B.S., Astrophysics	June 2008
RESEARCH POSITIONS	University of Texas at Austin , Austin, TX <i>Assistant Professor, Department of Physics</i>	Aug. 2022 - Present
	Fulbright Scholar Program , Santiago, Chile <i>Postdoctoral Fulbright Scholar</i>	Jan. 2022 - May 2022
	<ul style="list-style-type: none"> • Developing a drone-based polarized calibration technique for millimeter telescopes with Prof. Rolando Dünner Paella at Pontificia Universidad Católica de Chile. 	
	University of California San Diego , La Jolla, CA <i>Simons Observatory Postdoctoral Scholar</i>	Sept. 2016 - July 2022
	<ul style="list-style-type: none"> • Simons Observatory leader for camera design, integration, and testing. • Simons Observatory systematic studies, data acquisition, and analysis. • BLAST-TNG flight preparations and Antarctic deployment. 	
	University of Pennsylvania , Philadelphia, PA <i>Graduate Student</i>	Sept. 2010 - May 2016
	<ul style="list-style-type: none"> • BLAST-TNG leader for liquid helium camera design, integration, and testing. • BLASTPol data reduction and analysis. • BLASTPol commissioning, testing, and Antarctic launch. 	
	California Institute of Technology , Pasadena, CA <i>Undergraduate Researcher</i>	Jun. 2006 - Jun. 2008
FELLOWSHIPS AND AWARDS	PI Launchpad <i>2021 Virtual PI Launchpad Participant</i>	June 2021
	<ul style="list-style-type: none"> • Selected for the workshop which trains potential PIs to navigate the flight mission proposal process. • Organized by the NASA SMD, the Heising-Simons Foundation, and the University of Arizona. 	
	Fulbright Scholar Program <i>Fulbright Postdoctoral Scholar Award</i>	Selected Feb. 2020
	<ul style="list-style-type: none"> • Awarded for 2020/2021 grant cycle, completed Jan. to May, 2022. 	
	University of Pennsylvania , Philadelphia, PA <i>School of Arts and Sciences Dissertation Completion Fellowship</i>	Sept. 2015 - May 2016
	American Astronomical Society (AAS) <i>Astronomy Ambassador</i>	Jan. 2015

¹BLASTPol: The Balloon-borne Large Aperture Submillimeter Telescope for Polarimetry²BLAST-TNG: The Balloon-borne Large Aperture Submillimeter Telescope - The Next Generation

RECENT PROFESSIONAL TALKS	2025 Scientific Ballooning Technologies Workshop, Minneapolis, MN <i>Hooked on Liquid Helium: Pathways to Alternatives</i>	May 2025
	Invited , MIT Kavli Institute for Astrophysics and Space Research, Boston, MA <i>Probing the beginning of the universe with precision microwave polarimetry observations</i>	April 2025
	Invited , Weinberg Inaugural Conference, Austin, TX <i>Experimental Cosmology at UT Austin: Probing the beginning of the Universe with the Simons Observatory</i>	Nov. 2024
	SPIE Astronomical Telescopes + Instrumentation, Yokohama, Japan <i>The Balloon-Borne Large Aperture Submillimeter Telescope Observatory (BLAST Observatory)</i>	June 2024
	National Radio Science Meeting, Boulder, CO <i>The Design and Validation of the Simons Observatory Cryogenic Receivers</i>	Jan. 2023
	SPIE Astronomical Telescopes + Instrumentation, Montreal, Canada <i>The Simons Observatory: Development and validation of the first Small Aperture Telescope, SAT-MF1</i>	July 2022
	From Planck to the Future of CMB, Ferrara, Italy <i>The Characterization and Calibration of the Simons Observatory Small Aperture Telescope: Status and future plans</i>	May 2022
	Invited , University of Texas at Austin, Dept. of Physics Colloquium, Virtual <i>The Simons Observatory, CMB-S4, and BLAST: Probing the beginning of the Universe with precision polarimetry experiments</i>	Jan. 2022
	2021 Scientific Ballooning Technologies Workshop, Virtual <i>The Enabling Technology Instrument</i>	May 2021
	Invited , Cornell University LEPP Seminar, Virtual <i>The Simons, BLAST, and CCAT Observatories: Probing the beginning of the Universe with precision polarimetry experiments</i>	Jan. 2021
	237th Meeting of the American Astronomical Society, Virtual <i>The Simons Observatory: the Small Aperture Telescopes (SATs)</i>	Jan. 2021
	Invited , San Diego Astronomy Association Monthly Meeting, Virtual <i>The Microwave Telescopes of the Simons Observatory</i>	Aug. 2020
	Invited , University of California Riverside Dept. of Physics and Astronomy Seminar, Virtual <i>The Simons Observatory and BLAST-TNG: Probing the beginning of the Universe with precision polarimetry experiments</i>	May. 2020
	Invited , University of Iowa Dept. of Physics and Astronomy Colloquium, Iowa City, IA <i>The Simons Observatory and BLAST-TNG: Probing the beginning of the Universe with precision polarimetry experiments</i>	Feb. 2020
	Invited , Cardiff University Seminar, Cardiff, UK <i>Forethought for foregrounds: Next steps in precision cosmology with the Simons Observatory and BLAST-TNG</i>	Sept. 2019
	Invited , Midwest Magnetic Fields Meeting 2019, Madison, WI <i>Dust polarimetry of the interstellar medium with the Simons Observatory and BLAST-TNG</i>	May 2019
	233rd Meeting of the American Astronomical Society, Seattle, WA <i>BLAST-TNG: Antarctic pre-flight integration</i>	Jan. 2019
	Invited , University of Southern California Colloquium, Los Angeles, CA <i>Forethought for foregrounds: Next steps in precision cosmology</i>	Sept. 2018
	SPIE Astronomical Telescopes + Instrumentation, Austin, TX <i>The Simons Observatory: Instrument Overview</i>	Jun. 2018

PROFESSIONAL **Simons Observatory Collaboration**

SERVICE	Chilean Joint Implementation Committee member. Science organizing committee member Education and public engagement committee co-leader. Local organizing committee member.	Nov. 2023 - Present July 2025 Sept. 2016 - Oct. 2020 Jun. 2017
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CMB-S4 Collaboration		
Governing Board Member	July 2023 - July 2025	
Education and Public Outreach Committee member.	Aug. 2020 - Aug. 2025	
Local organizing committee member.	Oct. 2019	
UCSD Physics Department		
Education and Public Outreach Committee member.	Aug. 2018 - 2021	
PROFESSIONAL CMB-S4 Collaboration	2018 - Present	
MEMBERSHIP		
Simons Observatory Collaboration	2016 - Present	
American Astronomical Society	2015 - Present	
SPIE: The international society for optics and photonics	2014 - Present	
BLAST Collaboration	2012 - Present	
MENTORING		
University of Texas at Austin , Austin, TX		
<i>Postdocs</i>	Nov. 2023 - Present	
Elle Shaw		
<i>Graduate Students</i>		
Tannishtha Nandi	Aug. 2024 - Present	
JB LLoyd	Aug. 2024 - Present	
Daniel Lee	Aug. 2023 - Present	
Henry Nachman	Aug. 2023 - Present	
<i>Undergraduate Researchers</i>		
Ani Pagni	May 2025 - Present	
Oorie Desai	Feb. 2024 - Present	
Quinlin Sandefer	Aug. 2022 - May 2023	
University of California San Diego , La Jolla, CA		
<i>Graduate Students</i>		
Bryce Bixler, <i>UCSD</i>	Jan. 2020 - July 2022	
Kaiwen Zheng, <i>Princeton University</i>	Jan. 2020 - Dec. 2020	
• Mentee within the Simons Observatory Mentorship Program.		
Michael Randall, <i>UCSD</i>	June 2019 - July 2022	
Ningfeng Zhu, <i>University of Pennsylvania</i>	Jan. 2018 - Dec. 2021	
• Mentee within the Simons Observatory Mentorship Program.		
Jacob Spisak, <i>UCSD</i>	June 2018 - Aug. 2021	
Tran Tsan, <i>UCSD</i>	Sept. 2017 - July 2022	
Joseph Seibert, <i>UCSD</i>	Sept. 2017 - July 2022	
Maximiliano Silva-feaver, <i>UCSD</i>	Sept. 2016 - July 2022	
<i>Research Assistants</i>		
Joseph Rodriguez, <i>UCSD</i>	Nov. 2019 - Mar. 2020	
Christopher Ellis, <i>UCSD</i>	June 2019 - June 2020	
Kevin Crowley, <i>UCSD</i>	Sept. 2016 - June 2018	
<i>Undergraduate Researchers</i>		
Tanah Bua, <i>Pomona College</i>	Aug. 2021 - Jan. 2022	
Ethan Wadhwa, <i>UCSD</i>	Aug. 2021 - Jan. 2022	
Hakob Abajian, <i>UCSD</i>	June 2019 - Dec. 2019	
Tamar Ervin, <i>University of Southern California</i>	July 2019 - Sept. 2019	
Logan Foote, <i>University of California Berkeley</i>	June 2019 - Aug. 2019	
University of Pennsylvania , Philadelphia, PA		
Mark Giovinazzi, <i>Undergraduate, Drexel University</i>	Jan. 2015 - May 2016	
Timothy McSorley, <i>Undergraduate, Drexel University</i>	Jan. 2015 - May 2016	

TEACHING EXPERIENCE	University of Texas at Austin , Austin, TX	
	<i>PHY386K: The Physics of Sensors</i>	SP2026
	<i>CNS Expert Teaching Assessment Program</i>	Aug. 2025 - Present
	• Provides teaching assessment training to faculty followed by observations of colleague's teaching to generate feedback as part of the advancement process.	
	<i>PHY353L: Modern Lab</i>	FA2025
	<i>PHY386K: The Physics of Sensors</i>	SP2025
	<i>PHY303L: Engineering Physics II</i>	FA2024
	<i>Mentoring Mindset Initiative</i>	Jan. 2024 - Dec. 2024
	• Program to introduce faculty members to evidence based teaching practices for introductory physics courses.	
	<i>PHY301: Mechanics</i>	FA2023
University of California San Diego , La Jolla, CA	<i>PHY380N: Experimental Physics</i>	Aug. 2023 - Dec. 2024
	• Advised three student projects with my lab.	
	<i>PHY303L: Engineering Physics II</i>	FA2022
	<i>Various guest lectures on experimental cosmology</i>	Aug. 2022 - Present
The Center for Engaged Teaching , La Jolla, CA	<i>PHYS 162 - Cosmology Guest Lecture</i>	May 12, 2021
	<i>Introduction to College Teaching</i>	Oct. 2017 - Dec. 2017
	• Developed expertise in evidence-based teaching practices that support student learning.	
The Netter Center , Philadelphia, PA	<i>The Netter Center Astronomy Curriculum Chair</i>	Aug. 2015 - May 2016
	• Developed a 12 Lesson Astronomy Curriculum for an under-served inner-city high school.	
	• Mentored undergraduate student volunteers who assisted in teaching the course.	
iPraxis , Philadelphia, PA	<i>iPraxis Afterschool Class Mentor</i>	Jan. 2015 - May 2015
University of Pennsylvania , Philadelphia, PA	<i>Teaching Assistant</i>	Jan. 2013 - May 2013
	• Phys 101: General Physics: Mechanics, Heat, and Sound	
	<i>Teaching Assistant Aug. 2011 - Dec. 2011, Jan. 2012 - May 2012, Aug. 2012 - Dec. 2012, Aug. 2013 - Dec. 2013</i>	
	• Astr 001: Survey of the Universe	
Center for Teaching and Learning		Aug. 2012
	• Teaching Assistant Training Workshop Leader	
	• Responsible for training new teaching assistants for the School of Arts and Sciences.	
Teaching Assistant		Aug. 2010 - Dec. 2010
	• Phys 101 and Phys 102 - Laboratory	
PUBLIC ENGAGEMENT	The University of Texas at Austin	
	Article: <i>Big Bang Vision: Exploring the Cosmic Microwave Background at Simons Observatory</i>	June 2025
	Article: <i>Simons Observatory blazes toward understanding our Universe's birth</i>	2024
	Article: <i>Postcards from the Field: First Light for a New High-Desert Telescope</i>	April 2024

University of California San Diego*The Cosmos Show Co-Host***June 2021 - Dec. 2022**

- Co-Host of public engagement Youtube channel with biweekly live shows supported by Wyoming Stargazing.

*Astronomy on Tap San Diego Co-Lead***Aug. 2017 - April 2020***Comicon panel member, "Putting more science in your fiction" July 2017, 2018, 2019, 2020(Remote)*

- Invited by the STEM advocacy group “The League of Extraordinary Scientists and Engineers.”

*San Diego Festival of Science and Engineering - Sponsored Booth***March 2017, 2018, 2019, 2020**

- Primary organizer for the physics department’s booth.

*Skype a Scientist***Jan. 2017 - Jan. 2018***Fleet Science Center - #2Scientists***Sept. 2016 - Feb. 2020**

- Members of the public ask participating scientists a wide range of science questions.

*San Diego area public talks***Sept. 2016 - Jan. 2022**

- Occurred once per quarter on average.

*San Diego Astronomy Association***Sept. 2016 - Jan. 2022****University of Pennsylvania***Department of Physics and Astronomy - Public Astronomy Nights***Sept. 2011 - May 2016***Philadelphia Science Festival - Science Carnival Sponsored Booth***May 2015, May 2016**

- Organized the Department of Physics and Astronomy’s demonstration booth.