

CONTACT INFORMATION	Fermilab PO Box 500 MS 209 Batavia, IL 60510-5011	<i>E-mail:</i> adama@fnal.gov <i>Phone:</i> (503)-380-0689
EMPLOYMENT AND EDUCATION	Fermilab , Scientist I University of Chicago , Department of Astronomy and Astrophysics, CASE Associate Fermilab , Wilson Fellow University of Chicago , Kavli Institute for Cosmological Physics, Associate Fellow Fermilab , Lederman Postdoctoral Fellow Advisor: Bradford Benson Massachusetts Institute of Technology , Ph.D., Physics Advisor: Enectalí Figueroa-Feliciano University of Chicago , A.B., Physics, Mathematics, with honors Advisor: Ed Blucher	2023-present 2021-present 2019-2023 2019-present 2015-2019 2010-2015 2006-2010
AWARDS AND HONORS	DOE Office of Science Graduate Fellowship NSF Graduate Research Fellowship , <i>declined</i> Presidential Fellowship , MIT Lewis Prize , University of Chicago, Dept. of Physics Phi Beta Kappa Grainger Fellowship , University of Chicago, Dept. of Physics College Honor Scholarship , University of Chicago	2012-2015 2012-2015 2010-2011 2010 2010 2009-2010 2006-2010
TEACHING	Organizer of summer student lecture series , SPT collaboration Seminar XL lead facilitator , MIT College Core Tutor , University of Chicago	Summer 2021-Summer 2023 Fall 2011 September 2008-June 2010
GRAD STUDENTS MENTORED	Kyle Ferguson (UCLA): Search for axions with SPT-3G Andrea Bryant (Chicago): GEM intern at Fermilab	2020-2022 Summer 2017
UNDERGRADUATES MENTORED	Nicki DiAngelo (Minnesota): SIST intern at Fermilab Achintya Krishnan (Wisconsin → PhD, Illinois): SIST intern at Fermilab Ebtihal Abdelaziz (Goshen → PhD, USC): SIST intern at Fermilab Taryn Imamura (Stanford → PhD, Carnegie Mellon): SIST intern at Fermilab	Summer 2023 Summer 2022 Summer 2021 Summer 2018

	Josémanuel Hernandez (Northwestern → SM, Chicago): SIST intern at Fermilab	Summer 2018
	Cory Cotter (Wisconsin → PhD, Chicago): SULI intern at Fermilab	Summer 2017
	AJ Corso (Chicago → PhD, UPenn): summer research	Summer 2016
	Chandler Schlupf (MIT → PhD, UCLA): UROP research, senior thesis	2012-2014
	Natalia Guerrero (MIT → PhD, Royal Holloway): UROP research	Spring 2012
HIGH-SCHOOL STUDENTS MENTORED	Arielle Pfeil: QuarkNet intern at Fermilab	Summer 2017
	Antony Simonoff: QuarkNet intern at Fermilab	Summer 2017
	Ben Hardin: QuarkNet intern at Fermilab	Summer 2016
	Ryan Thornton: QuarkNet intern at Fermilab	Summer 2016
FUNDING	<i>SPT-SLIM: A Line Intensity Mapping Pathfinder</i> replacement PI, NSF-ATI 2021-2024: \$926,325	
	<i>SPT-SLIM: The South Pole Telescope Summertime Line Intensity Mapper</i> co-PI, Fermilab internal LDRD 2021-2024: \$683,314	
	<i>High-throughput quantum sensors and materials testing at ultra-low temperature</i> (project within ORNL-led Quantum Science Center), DOE Office of Science 2021-2025: \$4,149,980	
	<i>Mass-Produced Detector Modules for Future Cosmic Microwave Background Experiments</i> PI, Fermilab internal LDRD 2021-2023: \$659,706	
	<i>Development of Background-Limited MKIDs for Microwave Cosmology</i> PI, Fermilab internal LDRD 2020: \$50,000	
	<i>Development of Microwave Readout Electronics for Massively Multiplexed Arrays of Transition-Edge Sensors</i> PI, Fermilab internal LDRD 2019 - 2022: \$424,197	
CONFERENCES AND TALKS	2nd US Antarctic Science Meeting: <i>SPT-SLIM: Line Intensity Mapping on the South Pole Telescope</i>	June 2023
	Fermilab Colloquium: <i>Probing Fundamental Physics with the Cosmic Microwave Background and CMB-S4</i>	March 2023
	Looking Ahead of Snowmass Seminar, Fermilab: <i>CMB in Snowmass</i>	February 2023
	CPAD Workshop 2022, contributed talk: <i>Line Intensity Mapping using On-Chip Spectrometers and SPT-SLIM</i>	December 2022
	University of Illinois, Urbana-Champaign: Center for AstroPhysical Surveys Seminar: <i>Measuring the High-Frequency CMB and Line Intensity Mapping with the South Pole Telescope</i>	September 2022
	SPIE Astronomical Telescopes and Instrumentation 2022, contributed talk: <i>SPT-3G+: High-Frequency CMB Measurements with KIDs on the South Pole Telescope</i>	July 2022

- APS April Meeting, contributed talk: *Technology for SPT-SLIM and Line-Intensity Mapping* **April 2022**
- COSMO-21, poster: *South Pole Telescope: Survey Status and Future Instruments* **August 2021**
- DPF-21 Meeting, contributed talk: *SPT-SLIM: Intensity Mapping Pathfinder with the South Pole Telescope* **July 2021**
- CPAD Instrumentation Frontier Workshop 2021, contributed talk: *Mapping the CMB at High-Frequency with Kinetic Inductance Detectors on the South Pole Telescope* **March 2021**
- Perimeter Institute: Particle Physics Seminar: *CMB with SPT-3G: Recent Results and Constraining Axions with CMB Polarization Rotation* **June 2020**
- SLAC, KIPAC Tea Talk: *SPT-3G: High-Resolution CMB Science at the South Pole* **April 2020**
- CPAD Instrumentation Frontier Workshop 2019, contributed talk: *KIDs for Next-Generation CMB Experiments* **December 2019**
- Topics in Cosmic Neutrino Physics, plenary talk: *Prospects for Neutrino Physics with SPT-3G and Future CMB Experiments* **October 2019**
- Low-Temperature Detectors 18, poster: *Performance of Al-Mn Transition-Edge Sensor Bolometers in SPT-3G* **July 2019**
- Fermilab, Particle Astrophysics Seminar: *SPT-3G and Next-Generation CMB Experiments* **April 2019**
- University of Toronto, Astro Seminar: *Probing Fundamental Physics with the South Pole Telescope and Beyond* **February 2019**
- Rencontres de Blois, parallel talk: *SPT-3G and Recent Results from the South Pole Telescope* **June 2018**
- Low-Temperature Detectors 17, plenary talk: *SPT3G: A Multichroic Receiver for the South Pole Telescope* **July 2017**
- Princeton University, Gravity Group Seminar: *SPT3G: Deployment and Science of a New Camera for the South Pole Telescope* **April 2017**
- 8th INFIERI Workshop, plenary talk: *SPT3G: A New Receiver for the South Pole Telescope* **October 2016**
- University of Michigan, HEP/Astro/Nuclear Seminar: *SPT3G: Fundamental Physics with a New Receiver for the South Pole Telescope* **September 2016**
- Fermilab Users Meeting, plenary talk: *Cosmology with the South Pole Telescope* **June 2016**
- Yale University, Weak Interactions Discussion Group: *Light WIMPs and Sterile Neutrinos with Cryogenic Detectors* **May 2015**
- Lawrence Berkeley National Lab, Research Progress Meeting: *Extending the Reach of SuperCDMS for Dark Matter Searches* **December 2014**
- International Conference on Particle Physics and Cosmology, parallel talk: *Low-Energy Analysis of Data from SuperCDMS Soudan* **August 2014**
- Brookhaven National Lab, Particle Physics Seminar: *Probing Light WIMPs with SuperCDMS* **May 2014**
- APS April Meeting, contributed talk: *Backgrounds and Discrimination Algorithms for Low-energy SuperCDMS Soudan Data* **April 2014**
- Rencontres de Moriond, Electroweak, plenary talk: *Constraints on Light WIMPs with SuperCDMS* **March 2014**

	Low-Temperature Detectors 15, poster: <i>Phonon Event Analysis in SuperCDMS iZIP Detectors</i>	June 2013
	APS April Meeting, contributed talk: <i>Underground Performance of SuperCDMS iZIP Detectors</i>	April 2013
	Rencontres de Moriond, Electroweak, student talk: <i>Coherent Neutrino Scattering with Cryogenic Semiconductor Detectors</i>	March 2012
	Low-Temperature Detectors 14, poster: <i>Simulations of Phase-Separated Transition-Edge Sensors for SuperCDMS</i>	August 2011
	APS April Meeting, contributed talk: <i>Simulations of Transition-Edge Sensors for SuperCDMS</i>	May 2011
PROFESSIONAL SERVICE	Referee for <i>Applied Physics Letters</i> , <i>Journal of Cosmology and Astroparticle Physics</i> , <i>Journal of Low Temperature Physics</i> , <i>Physical Review D</i>	
	Editorial reviewer for Cambridge University Press	
	APS Division of Particles and Fields, Instrumentation Award committee vice-chair (2023) and chair (2024)	
	Panel reviewer for DOE cosmic frontier (2020, 2023, 2024), NASA APRA (2019, 2022), NASA Postdoctoral Program (2022), SBIR (2022, 2023, 2024)	
	CMB-S4 Governing Board member (2021-2023) and vice-chair (2022-2023)	
PUBLIC TALKS	Fermilab Saturday Morning Physics: <i>Cosmology</i>	November 2020
	After School Matters: <i>Looking Back in Time: Cosmology from the South Pole</i>	June 2020
	Fermilab Ask-a-Scientist: <i>Looking Back in Time: Cosmology from the South Pole</i>	June 2020
	Fermilab Saturday Morning Physics: <i>Extragalactic Astronomy</i>	April 2020
	Fermilab Saturday Morning Physics: <i>Cosmology</i>	November 2019
	Lifelong Learning Institute: <i>Cosmology and the Early Universe</i>	September 2018
	MIT Kavli Institute IAP Seminar: <i>Hunting Dark Matter</i>	January 2015
	MIT Kavli Institute IAP Seminar: <i>Hunting Dark Matter</i>	January 2014
	MIT Astronomical Event: <i>Dark Matter Searches</i>	October 2012
OUTREACH ACTIVITIES	Panelist for FNAL/BNL Summer School, Fermilab	July 2024
	Panelist for FNAL/BNL Summer School, Fermilab	July 2023
	Co-Director, Saturday Morning Physics, Fermilab	2019-2023
	Lecturer and co-organizer, KICP Summer School on CMB Detectors and Instrumentation	August 2022
	Dark Matter Day Panelist, Fermilab	October 2021
	Volunteer for Ask-a-Scientist, Fermilab	March 2018
	Dark Matter Day Panelist, Dark Matter Coffee	October 2017
	Organizer for Saturday Morning Physics, Fermilab	Fall 2015-Spring 2019

Career panelist for “High Energy... High Ambition,” Fermilab **April 2017**
Volunteer with Quarknet Radio Telescope, Fermilab **October 2015-August 2016**
Fermilab Family Open House: panelist for
“A Day in the Life” **February 2016**