

WEISHUANG LINDA XU

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AFFILIATIONS

University of California Berkeley, Lawrence Berkeley National Lab BERKELEY CENTER FOR THEORETICAL PHYSICS <i>Postdoctoral Researcher</i>	2021 – Berkeley, CA
Harvard University CENTER FOR FUNDAMENTAL LAWS OF NATURE <i>PhD in Physics</i> <i>Advisors: Lisa Randall, Cora Dvorkin</i>	2015 – 2021 Cambridge, MA
Massachusetts Institute of Technology DEPARTMENT OF PHYSICS <i>BS in Physics, Minor in Astronomy, Minor in Music</i> <i>Advisor: Anna Frebel</i>	2011-2015 Cambridge, MA

RESEARCH INTERESTS

Dark matter, Physics beyond the Standard Model, Early universe cosmology, Large- & small-scale structure

PUBLICATIONS

** *In particle theory publications, authors are listed **alphabetically** by convention.*

- 2302.00008** **Scalar Co-SIMP Dark Matter: Models and Sensitivities**
Aditya Parikh, Juri Smirnov, **WLX****, & Bei Zhou, 2023, J. High Energ. Phys. 08 (2023) 91
- 2212.07435** **A Search for Dark Matter Lines at the Galactic Center with 14 Years of Fermi Data**
Joshua W. Foster, Yujin Park, Benjamin Safdi, Yotam Soreq, & **WLX****, 2022
Phys.Rev.D 107 (2023), 103047
- 2207.11262** **The Inflated Chern-Simons Number in Spectator Chromo-Natural Inflation**
Hengameh Bagherian, Matthew Reece, & **WLX****, 2022, J. High Energ. Phys. 01 (2023) 99
- 2207.10090** **Higgsino Dark Matter Confronts 14 years of Fermi Gamma Ray Data**
Christopher Dessert, Joshua W. Foster, Yujin Park, Benjamin Safdi, & **WLX****, 2022
Phys.Rev.Lett. 130 (2022), 201001
- 2107.09664** **Cosmological Constraints on Light (but Massive) Relics**
WLX, Julian B. Muñoz, & Cora Dvorkin, 2021, Phys.Rev.D 105 (2022) 9, 095029
- 2010.15129** **A Closer Look at CP-Violating Higgs Portal Dark Matter as a Candidate for the GCE**
Katherine Fraser, Aditya Parikh, & **WLX****, 2020, J. High Energ. Phys. 03 (2021) 123
- 2006.09395** **Accurately Weighing Neutrinos with Cosmological Surveys**
WLX, Nicholas DePorzio, Julian B. Muñoz, & Cora Dvorkin, 2020, Phys.Rev.D 103 (2021) 2, 023503
- 2006.09380** **Finding eV-scale Light Relics with Cosmological Observables**
Nicholas DePorzio, **WLX**, Julian B. Muñoz, & Cora Dvorkin, 2020, Phys.Rev.D 103 (2021) 2, 023504
- 1910.14669** **Searching for Dark Photon Dark Matter with Cosmic Ray Antideuterons**
Lisa Randall & **WLX****, 2019, J. High Energ. Phys. 05 (2020) 081
- 1904.08949** **Testing Λ CDM With Dwarf Galaxy Morphology**
WLX & Lisa Randall, 2019, Astrophys. J. 900 (2020) 1, 69
- 1802.06788** **Probing sub-GeV Dark Matter-Baryon Scattering with Cosmological Observables**
WLX, Cora Dvorkin, & Andrew Chael, 2018, Phys.Rev.D 97 (2018) 10, 103530

SERVICE & OUTREACH

Berkeley Physics DEI Committee	<i>Fall 2022 -</i>
Letters to a Pre-Scientist	<i>Fall 2022 -</i>
Science Accelerating Girls' Engagement in STEM [SAGE] at LBL	<i>Summer 2022</i>
Science en Acción Camp at LBL	<i>Spring 2022</i>
UC Berkeley Compass Lectures	<i>Spring 2022</i>

AWARDS

Rising Stars in Physics Participant	<i>Spring 2023</i>
White Prize for Excellence in Undergraduate Teaching	<i>Spring 2021</i>
Science Delegate, 52nd International Achievement Summit	<i>Fall 2016</i>
Barrett Prize for Student Astrophysics Research	<i>Spring 2015</i>

TEACHING

Certificate of Distinction in Teaching	<i>Spring 2021, Spring 2020, Spring 2019</i>
Harvard Physics 125: Widely Applied Physics	<i>Spring 2021</i>
Harvard Physics 302: Teaching and Communicating Physics	<i>Spring 2021</i>
Harvard Physics 15a: Mechanics and Special Relativity	<i>Spring 2020</i>
Harvard Physics 143a: Quantum Mechanics I	<i>Spring 2019</i>
Harvard Physics 212: Graduate Cosmology	<i>Fall 2018</i>
Harvard Applied Physics 50b: Electricity & Magnetism	<i>Spring 2018</i>

RECENT TALKS & SEMINARS [2022- 2023]

Bay Area Particle Theory Seminar	<i>October 2023</i>
Brown IDEA Seminar	<i>October 2023</i>
Harvard CfA Seminar	<i>October 2023</i>
SLAC EPP Theory Seminar	<i>October 2023</i>
UC Irvine Particle Theory Seminar	<i>June 2023</i>
Rising Stars In Physics Workshop	<i>May 2023</i>
CCA Flatiron Institute PACMAN Seminar	<i>May 2023</i>
UMich LCTP Symposium	<i>May 2023</i>
NYU CCPP Seminar	<i>May 2023</i>
Johns Hopkins TIPAC Seminar	<i>April 2023</i>
UC San Diego HEP Seminar	<i>February 2023</i>
Stony Brook U C-N Yang Institute Seminar	<i>December 2022</i>
IBS-ICTP-MultiDark Workshop	<i>December 2022</i>
CERN Theory Institute on New Physics From Galaxy Clustering (<i>plenary</i>)	<i>November 2022</i>
UC Davis QMAP Seminar	<i>November 2022</i>
U Oregon IFS Seminar	<i>October 2022</i>
Stanford SITP Wine & Cheese Seminar	<i>October 2022</i>
INT 22-b: Dark Matter in Compact Objects, Stars, and in Low Energy Experiments	<i>August 2022</i>
MITP Summer Program: Towards the Next Fundamental Scale of Nature:	
New Approaches in Particle Physics and Cosmology	<i>July 2022</i>
UC Berkeley Compass Lectures	<i>April 2022</i>
UC Santa Cruz SCIPP Seminar	<i>March 2022</i>