

Chihway Chang

LAST UPDATED	September 7, 2026	
CONTACT INFORMATION	University of Chicago William Eckhardt Research Center 451 5640 South Ellis Avenue Chicago, IL 60637 USA	DOB: 1985/03/12 +1-773-702-3369 chihway@uchicago.edu https://chihway.github.io http://surveys.uchicago.edu
ACADEMIC APPOINTMENTS	Co-PI and Deputy Director for Nurturing Next Generation, The NSF-Simons AI Institute for the Sky (SkAI Institute) 2025 – present Associate Professor, Department of Astronomy and Astrophysics (A&A), University of Chicago 2025 – present Assistant Professor, Department of Astronomy and Astrophysics (A&A), University of Chicago 2018 – 2025 Senior Member, Kavli Institute of Cosmological Physics (KICP), University of Chicago 2018 – present Clare Boothe Luce Assistant Professor, Department of Astronomy and Astrophysics (A&A), University of Chicago 2018 – 2023 KICP Fellow, KICP, University of Chicago 2016 – 2018 Postdoctoral Fellow, Institute of Astronomy, ETH Zurich 2013 – 2016	
EDUCATION	Physics Department, Stanford University Thesis: <i>Systematic Effects in Weak Lensing Measurements for Future Optical Surveys</i> Advisors: Steven M. Kahn & Rafe H. Schindler Physics Department, National Taiwan University	Ph. D. 2013 B. S. 2007
HONOURS AND RECOGNITIONS	Scialog Fellow (Early Science with the LSST) Editor's choice in Physical Review Letters DOE Early Career Award Clare Boothe Luce Assistant Professor KICP Fellow Editor's choice in Physical Review Letters 62nd Meeting of Nobel Laureate, Lindau, Germany Presidential Awards, National Taiwan University	2024 2023 2021 2018 2016 2015 2012 2004 – 2007
SCIENTIFIC COLLABORATIONS	I am a core member and recognized builder (i.e., foundational contributor) in two large scientific collaborations – the Dark Energy Survey (DES) and the Rubin Observatory Legacy Survey of Space and Time Dark Energy Science Collaboration (LSST DESC). I am also a member of the Roman Space Telescope Project Infrastructure Team (PIT) team “Maximizing Cosmological Science with the Roman High Latitude Imaging Survey”. Dark Energy Survey (DES): I have been part of DES since 2013 and have been active in the weak gravitational lensing working group, as well as the general area of cosmology from large-scale structure. I am one of the two Science Committee Co-Chairs in DES, which directs and coordinates all scientific efforts within DES. DELVE (DECam Local Volume Exploration Survey) Builder 2023 – present DES Science Committee Co-Chair 2021 – present DES Builder 2019 – present DES Membership Committee 2019 – 2021 DES Management Committee 2018 – 2021	

DES Weak Lensing Mass Mapping Analysis Team Lead	2016 – 2020
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Rubin Observatory Legacy Survey of Space and Time Dark Energy Science Collaboration (LSST DESC): I have been active in LSST DESC since 2016 (and active in the LSST science working groups before the start of DESC in 2010). I primarily work in the weak gravitational lensing working group, as well as the general area of cosmology from large-scale structure. Initiated through my term as the Deputy Analysis Coordinator 2021-2023, I co-lead the SStatic Analysis Roundtable (STAR) group.

LSST DESC Builder	2024 – present
DESC Speaker Bureau	2024 – present
Rubin in-kind contributor team (Science validation of PSF characterization)	
https://sitcomtn-050.lsst.io/	2024 – present
LSST DESC Deputy Analysis Coordinator	2021 – 2023
LSST DESC Collaboration Council	2020 – 2021
LSST DESC Weak Lensing Working Group Coordinator	2018 – 2020

PROFESSIONAL SERVICE AND RECENT CONFERENCES ORGANIZED	Cosmological Synergies from Multiple Overlapping Probes Observed by Next Generation Surveys LOC/SOC	2025
	Roman PIT meeting SOC	2024
	Fundamental Physics meets Current and Future Facilities in Cosmology (Brazil) SOC	2024
	KICP-20 “Cosmology past, present, and future” (KICP) LOC/SOC	2024
	UChicago-Taiwan student research program in the Sciences (UCTS) organizer	2024
	Spec-S5 Instrumentation Workshop (KICP) LOC	2024
	Lensing at Different Scales Workshop (KICP) SOC	2023
	DES Y6KP Workshop (KICP) LOC	2023
	LSS × CMB Workshop (Kyoto) SOC	2023
	DES Collaboration Meeting (Portsmouth) SOC	2023
	LSST DESC Collaboration Meeting (KICP) LOC Co-Chair/SOC	2022
	CMB-S4 Collaboration Meeting (remote) SOC	2020
	Snowmass 2021 Topical Group Convener (CF6: Dark Energy and Cosmic Acceleration: Complementarity of Probes and New Facilities)	2020 – 2021
	Cosmic Controversy (KICP) SOC	2019
	Joint SPT-DES Analysis Workshop (KICP)	2018
	DES Collaboration Meeting (Chicago) LOC	2017
	Review panel for NSF, DOE	2020 – present
	Reviewer for MNRAS, ApJ, Nature Astronomy, DES/DESC Collaboration	2014 – present

SCIENTIFIC PROPOSALS AWARDED	Research grants that I have led or contributed to significantly. Total funding through grants, awards, and scholarships: \$3.0M .	
	Roman Cycle I: A New Look at Dark Matter in the Roman Era: Joint Inference of High-Resolution Mass Map and Cosmology\$150k [PI]	2027 – 2029
	Roman Cycle I: Dynamical state of galaxy clusters in the Roman COSMOS Deep Field \$150k [Co-PI]	2027 – 2030
	DOE FY2025 HEP Comparative Review, Theoretical High Energy Physics Research at the University of Chicagos, \$330k [Co-PI]	2025 – 2028
	France and Chicago Collaborating in the Sciences (FACCTS) grant: Breaking Through Blending: A Multi-Survey Approach to Dark Energy with LSST, Euclid, and Roman, \$12k [PI]	2025 – 2027

NSF AI in Astronomy Institute 2024, AI for the Sky: The SkAI Institute, \$20M for the entire institute (not counted above) [Senior Personnel] 2024 – 2029

NSF AAG 2024, A Novel Approach to Constraining Baryonic Feedback: Coherent Field-Level Inference of Lensing and Electron Pressure, \$458k [PI] 2024 – 2027

NASA Roman Space Telescope Project Infrastructure Team (PIT) 2023, Maximizing Cosmological Science with the Roman High Latitude Imaging Survey, \$323k [Co-I] 2024 – 2029

NSF AAG 2022, Collaborative Research: Combining Galaxy and Cosmic Microwave Background Surveys for Precise and Robust Constraints on Cosmology, \$250k [PI] 2023 – 2026

France and Chicago Collaborating in the Sciences (FACCTS) grant: Large-Scale Structure Simulations for Next Generation Cosmological Modeling, \$25k [PI] 2022 – 2023

DOE Early Career Award 2021, Towards Robust Cosmology from Large-Scale Structure with Galaxy Surveys, \$750k [PI] 2021 – 2026

NSF AAG 2020, Collaborative Research: Cosmic Shear on Extremely Large Scales with the Dark Energy Camera, \$360k [PI] 2021 – 2024

DOE FY2020 HEP Comparative Review, Cosmology with Galaxy and CMB Surveys: Mitigating Systematic Effects Through Combining Datasets, \$125k [PI] 2020 – 2022

University of Chicago Center for Data and Computing (CDAC) Data Science Discovery Grant – When Technology Transforms Society: Considering the Societal and Ethical Impacts of Quantum Computing and AI, \$15k [PI] 2019 – 2020

UChicago seed funding, Mapping Dark Matter with the Faintest Galaxy, \$40k [PI] 2018 – 2019

TEACHING

The SkAI Institute Satellite Early Education for Discovery (SEED) Program: *Lecturer* Summer 2026

ASTR 298 (UChicago), Research Seminar: *Guest Lecturer* Spring 2024

ASTR 340 (UChicago) Statistical Methods in Astrophysics: *Instructor* Winter 2024, 2025

ASTR 18850 (UChicago) Interpreting Nature – on the Relation between Art and Science: *Instructor* Spring 2023, 2024, 2025, 2026 (Paris)

ASTR 406 (UChicago) Gravitational Lensing: *Instructor* Fall 2020

ASTR 133 (UChicago) Introduction to Astrophysics: *Instructor* Spring 2019, 2020, 2021, 2022

PHYS 372 (UChicago), Space Physics and Astrophysics: *Guest Lecturer* Fall 2016, 2018

Astrophysics I (ETH): *Substitute Lecturer* Fall 2015, 2014

Astrowoche (ETH): *Teaching Assistant* Spring 2016, 2015

Cosmological Probes (ETH): *Teaching Assistant and Substitute Lecturer* Spring 2014

Physics 21 (Stanford), Mechanics and Heat: *Teaching Assistant* Fall 2011

Physics 23 (Stanford), Electricity and Optics: *Teaching Assistant* Winter 2007

Physics 41 (Stanford), Light and Heat: *Teaching Assistant* Fall 2007

ADVISING AND MENTORING

Postdocs and research scientists:

Chun-Hao To September 2024 – present

Eric & Wendy Schmidt AI Fellow at UChicago (serve as primary mentor). Primarily working in DES and Roman on simulations and cluster cosmology. Expert in combining galaxy cluster datasets across different wavelengths.

Marco Gatti August 2024 – October 2025
KICP Fellow (serve as primary mentor). Primarily working in DES on weak lensing. Expert in higher-order statistics and new statistical techniques to extract cosmological information from data. Will also be transferring knowledge to LSST DESC.

Giulia Giannini October 2022 – October 2025
Postdoc primarily working in DES on weak lensing and large-scale structure cosmology. Expert in redshift calibration and galaxy-galaxy lensing. Transferring knowledge to LSST DESC.

Yuuki Omori January 2021 – present
Working with SPT and my group. Expert in CMB lensing and cross-correlation between galaxy and CMB datasets. Also working on field-level inference for weak lensing. Transitioned from postdoc to research scientist in 2024.

Lucas Secco September 2020 – January 2024
KICP Fellow (served as primary mentor). Worked on DES cosmoc shear analysis and then helped with the DELVE cosmic shear analysis effort. Investigated lensing higher-order statistics as well as cosmic tensions. Moved on to Boston Consulting Group.

Judit Prat October 2019 – December 2023
Postdoc working on both DES and LSST DESC. Expert in weak lensing and large-scale structure cosmology and contributed to major infrastructure in both DES and DESC pipelines. Moved on to a Eric & Wendy Schmidt AI Fellow at UChicago (served as primary mentor), then a Nordita Fellow.

Graduate students:

Shrihan Agarwal December 2023 – present
PhD, UChicago A&A. Studying the impact of spatially varying systematic effects in weak lensing data for DES, DELVE and LSST. Won an 2023 NSF Graduate Research Fellowship.

Johnny Pitocco August 2023 – present
PhD, UChicago A&A. Joint advised with Jeff McMahon working on cosmology analysis with DES Y3 data and ACT DR6 lensing.

Jazmine Jefferson June 2022 – August 2026
PhD, UChicago A&A. Working on reanalysis of Stage-III weak lensing data sets in the context of LSST. Won an 2021 NSF Graduate Research Fellowship.

Dhayaa Anbajagane September 2020 – August 2026
PhD, UChicago A&A. Working on a wide array of topics in DES and DELVE: cluster profiles, higher-order statistics in lensing, and connection with early universe physics. Also leading the DELVE cosmic shear analysis. Won an 2020 NSF Graduate Research Fellowship and a 2023 CCAPP Price Prize in Cosmology and Astrophysics.

Georgios Zacharegkas October 2018 – August 2023
PhD, UChicago A&A. Studied the modeling of small-scale information in galaxy-galaxy lensing and galaxy clustering through the Halo Occupation Distribution framework and constrained the models with DES data. Moved on to a postdoc position at the Argonne National Lab.

Dimitrios Tanoglidis October 2017 – October 2019
PhD, UChicago A&A (primary advisor Alex Drlica-Wagner). Worked on investigating sample selection in clustering measurements. Moved on to Data Science Fellow at UPenn.

Yi Zhao September 2018 – December 2018
Master, UChicago PSD. Worked on galaxy-galaxy lensing measurement in simulations.

Marco Gatti October 2017 – May 2019
PhD, Barcelona A&A (primary advisor Ramon Miquel). Using DES data to perform higher-order statistics measurement and modeling. Moved on to a postdoc position at UPenn.

Claudio Bruderer October 2016 – June 2018
PhD, ETH Zurich A&A (primary advisor Alexandre Refregier). Develop a novel weak lensing shear estimation method based-on fast forward-modeling.

Undergraduate and post-bacc students:

Harjas Sandhu March 2024 – March 2025
Major in Physics, UChicago. Joint advise with Eric Baxter. Working on using machine learning to perform background estimation for CMB datasets.

Kate Overdeck June 2023 – December 2023
Major in A&A, UChicago. Joint advised with Giulia Giannini and Josh Frieman to study galaxy clustering split by colors.

Louise Gagnon June 2022 – September 2023
Major in A&A, UChicago. Joint advised with Judit Prat on combining gravitational wave data and galaxy surveys.

Jon Shao June 2022 – June 2023
Major in Physics, UChicago. Joint advised with Dhayaa Anbajagane on looking at how baryonic effects impact cluster characteristics. Moved on to PhD program at Caltech.

Kihana Wilson December 2021 – June 2023
Major in A&A, UChicago. Joint advised with Judit Prat on studying the impact of deflection on weak lensing and clustering measurements.

Raul Basilides Gomez Del Estal Teixeira July 2021 – June 2024
Major in A&A, UChicago. Working on redshift estimation and calibration for the DELVE cosmic shear project. Moved on to PhD program at Duke.

Nathalie Chicoine July 2020 – August 2024
Major in A&A, UChicago. Joint advised with Judit Prat on measuring lensing around low surface brightness galaxies (LSBG), as well as cosmology from DELVE. Moved on to PhD program at UPitt.

Zhuoqi Zhang December 2019 – June 2023
Major in Physics, UChicago. Worked on combining CMB lensing and galaxy surveys for LSST DESC. Also worked on DELVE cosmic shear testing. Moved on to PhD program at Stanford.

Ariel Amsellem January 2019 – December 2020
Major in Physics, UChicago. Studied the splashback radius in simulations and compared to data. Moved on to PhD program at CMU.

Benjamin Levine December 2019 – 2021
Major in A&A, UChicago. Studies the effect of blending on cosmology from galaxy clustering in LSST. Moved on to PhD program at Stonybrooks.

Rebecca Chen October 2017 – May 2019
Major in A&A, UChicago. Worked on PSF modeling and measuring moments in weak lensing mass maps. Moved on to PhD program at Duke.

PUBLIC OUTREACH	Picture an Astronomer opening panel	2025
	Adler SVL volunteer	2024 – present
	UChicago myCHOICE workshop: Business of Running a Research Group	2023
	Lecture and volunteer at Space Explorer	2023 – present
	PSD Adler panel discussion	2023
	Interview with the Chicago Council on Science and Technology (C2ST)	2022
	Talk at the Ryerson Astronomical Society at UChicago	2021
	Talk at Project Exploration (middle school students)	2021
	Kavli Community Forum career panel	2021
	GRADUCon 2021 panel	2021
	UChicago PSD Women in STEM panel	2021
	KIPAC career panel	2020
	Panel at SLAC public lecture series	2020
	Career panel in DES, SLAC	2018, 2020
	Co-organizer of workshop “When Technology Transforms Society: Considering the Societal and Ethical Impacts of Quantum Computing and AI”	2019
	APS Conferences for Undergraduate Women in Physics (CUWiP) Panel	2019
	Public talk at the <i>Art of Science</i> series	2018
	Volunteer at the Adler Planetarium: <i>Astronomy Conversations</i>	2016 – 2020
	DES outreach program <i>DarkBites: Lead illustrator</i> , 50+ illustrations (https://www.darkenergysurvey.org/education/darkbites/)	2014 – 2015, 2021
	SLAC tour guide	2010 – 2013

PRESS	Scientists release newly accurate map of all the matter in the universe [UChicago, 2023]
	Less clumpy universe may suggest existence of mysterious forces [The Guardian, 2023]
	Cosmological Parameters Improved by Combining Data [APS, 2023]
	Connecting the dots in the sky could shed new light on dark matter [SLAC, 2020]
	Dark Energy Survey reveals most accurate measurement of dark matter structure in the universe [Fermilab, 2017]
	New map of Universe’s dark matter [BBC, 2017]
	Scientists Unveil New Inventory of Universe’s Dark Contents [Quanta, 2017]
	Erhellendes zur Dunklen Materie[Spiegel, 2017]
	The Halo Boundary of Galaxy Clusters in SDSS [KICP, 2017]
	Dark matter map unveils first results [BBC, 2015]

SELECTED TALKS	AAS DES session, Pheonix, AZ	January 6, 2026
	Astronomy Seminar, Purdue University, IN	November 10, 2025
	Invited talk at "COSMO-25: 28th International Conference on Particle Physics & Cosmology", Pittsburgh, PA	October 13, 2025
	Invited talk at "Beyond-2pt Statistics Meet Survey Systematics", Tokyo, Japan	September 16, 2025
	Invited talk at "Fundamental Physics meets Current and Future Facilities in Cosmology", Sao Paolo, Brazil	December 2, 2024
	Lecture at the UChicago Data Science Institute Summer School, Chicago, IL	July 18, 2024
	Invited talk at Gordon Research Conference "Imaging and Visualization at the Junction of Physics, Engineering and Data Science", Newry, MN	June 9, 2024

Keynote speaker at "COSMO21", Chania, Greece	May 20, 2024
UChicago DSI research highlight, Chicago, IL	May 16, 2024
KICP Colloquium, KICP, Chicago, IL	April 10, 2024
Invited talk at UPenn cosmology group, UPenn, Pennsylvania, PA	November 20, 2023
Invited talk at "KIPAC@20", SLAC, Menlo Park, CA	September 12, 2023
Invited talk at "Modified Gravity", UIUC, Urbana Champaign, IL	May 19, 2023
Overview talk, "LSS x CMB Workshop", Kyoto, Japan	April 10, 2023
Invited talk at Kahn Symposium, SLAC, Menlo Park, CA	March 3, 2023
Lecturer at "Cosmology on the Beach", Playa del Carmen, Mexico	November 30, 2022
Astronomy Seminar, University of Cincinnati, OH	November 1, 2022
Physics Colloquium, University of Kentucky, Lexington, KY	October 28, 2022
Plenary talk at "DECam at 10 Years Workshop", Tucson, AZ	September 12, 2022
Discussion session at Higher-Order Statistics Workshop, Aspen, CO	June 5, 2022
Talk at CMB-S4 Collaboration Meeting, remote	March 13, 2022
EPFL Colloquium, remote	March 7, 2022
Astronomy and Astrophysics Colloquium, Chicago, IL	February 16, 2022
CIERA Astronomy Seminar at Northwestern, Evanston, IL	November 9, 2021
Plenary talk at "Rubin Project and Community Workshop", remote	August 12, 2021
Invited review talk "Growth of Structure Summer Seminar Series", remote	June 23, 2021
CITA Seminar, remote	March 28, 2021
Invited Panel for SLAC public talk series, remote	September 29, 2020
Invited talk at IPMU conference "Cosmic Acceleration", Tokyo, Japan	February 17, 2020
Physics Colloquium, Kansas State University, Manhattan, KS	October 21, 2019
Invited talk at conference "Cosmic Controversy", Chicago, IL	October 5, 2019
Plenary talk at conference "COSMO19", Aachen, Germany	September 2, 2019
Invited talk at "LSST DESC Dark Matter Workshop", Chicago, IL	August 5, 2019
Plenary talk at conference APS DPF, Boston, MA	July 31, 2019
Astrophysics Seminar, McGill University, Montreal, Canada	July 3, 2019
Plenary talk at "Quantum Theory and Symmetry-XI", Montreal, Canada	July 2, 2019
Panelist at workshop ICG25, State College, PA	June 24, 2019
Fermilab Astrophysics Seminar, Baltavia, IL	June 10, 2019
Invited talk at LSST in South America, Sao Paulo, Brazil	December 18, 2018
Kavli Symposium, Oslo, Norway	September 1, 2018
Invited talk at COSPAR, Pasadena, CA, USA	July 16, 2018
Invited talk at APS, Columbus, OH, USA	April 17, 2018
UChicago Astro Seminar, Chicago, IL, USA	February 27, 2018
Rutgers Astro Seminar, New Brunswick, NJ, USA	February 19, 2018
Duke Physics Colloquium, Durham, NC, USA	February 14, 2018
University of Pittsburgh Physics Colloquium, Pittsburgh, PA, USA	January 30, 2018
UC Berkeley Physics Colloquium, Berkeley, CA, USA	January 23, 2018
Cosmology Group Meeting, CCA, NY, USA	November 9, 2017
Cosmology Seminar, Princeton/IAS, NJ, USA	November 6, 2017
Fermilab Astro Seminar, Fermilab, IL, USA	October 23, 2017
Astro/Cosmology Seminar, CMU, PA, USA	October 13, 2017

Astrophysics and Cosmology Seminar, UIUC, IL, USA	September 20, 2017
Cosmology Seminar, BNL, NY, USA	September 14, 2017
Instrumentation Seminar, BNL, NY, USA	September 13, 2017
The Nonlinear Universe, Smartno, Slovenia	July 20, 2017
Fermilab 50th User Meeting, Fermilab, IL, USA	June 8, 2017
KICP Colloquium, KICP, IL, USA	May 31, 2017
Astronomy Chalk Talk, U of Chicago, IL, USA	January 24, 2017
Cosmology Seminar, UCL, London, UK	December 21, 2016
Astronomy Colloquium, UIUC, IL, USA	November 1, 2016
KICP Friday Seminar, KICP, IL, USA	October 7, 2016
Cosmology Seminar, KIPAC, CA, USA	May 16, 2016
Kosmologietag Overview Talk, Bielefeld University, Germany	April 29, 2016
Astrophysics Colloquium, ASIAA, Taipei, Taiwan	March 28, 2016
RAS Specialist Discussion Meeting, London, UK	February 12, 2016
Swiss Python Summit, Rapperswil, Switzerland	February 5, 2016
Astrophysics Seminar, Rutgers University, NJ, USA	August 11, 2015
Cosmology Lunch, Princeton University, NY, USA	August 10, 2015
Fourteenth Marcel Grossmann Meeting (MG14) Rome, Italy	July 17, 2015
APS April meeting, Baltimore, MD, USA	April 14, 2015
Weekly Colloquium, IEEC-CSIC, Barcelona, Spain	October 8, 2014
Astrophysics Seminar, ASIAA, Taipei, Taiwan	September 19, 2014
Research Seminar Shanghai Jiao Tong University, Shanghai, China	September 9, 2014
DES-LSST Joint Workshop, Fermilab, IL, USA	March 24, 2014
Swiss Cosmology Day, ETH Zurich, Switzerland	February 6, 2014
ETH Research Seminar, ETH Zurich, Zurich, Switzerland	September 19, 2013
Astrophysics Seminar, JPL, CA, USA	September 2012
Special Seminar, IPMU, Tokyo, Japan	August 2012
SnowPAC, Snowbird, CO, USA	March 22, 2012

Publications – Chihway Chang

Lead author (marked with * and bold numbers, including as first 1-3 authors or papers from students or postdocs I directly advise and have significant contributions) of 53+ refereed publications in weak gravitational lensing, cross-correlation, and other large-scale cosmology topics. Contributing author of a total of 187+ publications. Full publication list available at [ORCHID](#) and [ADS](#).

SUBMITTED
JOURNAL
PUBLICATIONS

187. C. To, T. Shin, **C. Chang**... et al., *Robust Photometry for Roman High-Latitude Imaging Survey Cosmology Using Roman and Rubin Imaging*. Arxiv e-print (2026) [2607.09849](#).
186. B. Remy, **C. Chang***, R. Willett, *Joint inference of weak lensing convergence map and cosmology with diffusion models*. Arxiv e-print (2026) [2606.31988](#).
185. A. Ouellette, Y. Omori, ...**C. Chang**... et al., *Cross-correlation of SPT-3G D1 CMB lensing and DES Y3 galaxy lensing*. Arxiv e-print (2026) [2606.26223](#).
184. J. Zhang, **C. Chang***... et al., *Accurate modeling for 3×2 pt analyses in Roman and Rubin: a study of model approximations*. Arxiv e-print (2026) [2606.23781](#).
183. Y. Omori, J. Zeghal, **C. Chang***... et al., *Towards Practical Field-Level Inference for Weak Lensing*. Arxiv e-print (2026) [2606.12255](#).
182. The Dark Energy Survey Collaboration, ...**C. Chang**... et al., *Constraints on Dynamical Dark Energy from Multiple Probes in the Full Dark Energy Survey*. Arxiv e-print (2026) [2605.27221](#).
181. S. Srinivasan, ...**C. Chang**... et al., *Brightest Cluster Galaxy ellipticity as proxy for halo shape: Orientation bias, assembly bias, and potential selection effects in SZ-selected clusters*. Arxiv e-print (2026) [2603.23689](#).
180. The Dark Energy Survey Collaboration, ...**C. Chang**... et al., *Dark Energy Survey Year 6 Results: Cosmological Constraints from Cosmic Shear*. Arxiv e-print (2026) [2602.10065](#).
179. D. Sanchez-Cid, ...**C. Chang**... et al., *Dark Energy Survey Year 6 Results: Weak Lensing and Galaxy Clustering Cosmological Analysis Framework*. Arxiv e-print (2026) [2601.14859](#).
178. The Dark Energy Survey Collaboration, ...**C. Chang**... et al., *Dark Energy Survey Year 6 Results: Cosmological Constraints from Galaxy Clustering and Weak Lensing*. Arxiv e-print (2026) [2601.14559](#).
177. LSST Dark Energy Science Collaboration, ...**C. Chang**... et al., *Opportunities in AI/ML for the Rubin LSST Dark Energy Science Collaboration*. Arxiv e-print (2026) [2601.14235](#).
176. T. Pedersen, ...**C. Chang**... et al., *Extracting intrinsic alignments in the Dark Energy Survey's year 1 data, using the self-calibration method and LSST-DESC tools*. Arxiv e-print (2026) [2601.10314](#).
175. T. Shin, ...**C. Chang**... et al., *Weak Lensing Mass Calibration of the ACT DR5 Galaxy Clusters with the DES Year 3 Weak Lensing Data*. Arxiv e-print (2025) [2512.18935](#).
174. B. Yin, ...**C. Chang**... et al., *Dark Energy Survey Year 6 Results: Redshift Calibration of the Weak Lensing Source Galaxies*. Arxiv e-print (2025) [2510.23566](#).
173. M. Rodriguez-Monroy, ...**C. Chang**... et al., *Dark Energy Survey Year 6 Results: improved mitigation of spatially varying observational systematics with masking*. Arxiv e-print (2025) [2509.07943](#).

172. S. Pandey, ...**C. Chang**... et al., *Constraints on cosmology and baryonic feedback with joint analysis of Dark Energy Survey Year 3 lensing data and ACT DR6 thermal Sunyaev-Zel'dovich effect observations*. Arxiv e-print (2025) [2506.07432](#).
171. J. Jefferson, Y. Omori, **C. Chang***... et al., *Reanalysis of Stage-III cosmic shear surveys: A comprehensive study of shear diagnostic tests*. Arxiv e-print (2025) [2505.03964](#).
170. The Dark Energy Survey Collaboration, ...**C. Chang***... et al., *Dark Energy Survey Year 3 Results: Cosmological Constraints from Cluster Abundances, Weak Lensing, and Galaxy Clustering*. Arxiv e-print (2025) [2503.13632](#).
169. C. To, E. Krause, **C. Chang***... et al., *Dark Energy Survey: Modeling strategy for multiprobe cluster cosmology and validation for the Full Six-year Dataset*. Arxiv e-print (2025) [2503.13631](#).
168. D. Anbajagane, **C. Chang***... et al., *The DECADE cosmic shear project IV: cosmological constraints from 107 million galaxies across 5,400 deg² of the sky*. Arxiv e-print (2025) [2502.17677](#).
167. D. Anbajagane, **C. Chang***... et al., *The DECADE cosmic shear project III: validation of analysis pipeline using spatially inhomogeneous data*. Arxiv e-print (2025) [2502.17676](#).
166. D. Anbajagane, A. Alarcon, R. Teixeira, **C. Chang***... et al., *The DECADE cosmic shear project II: photometric redshift calibration of the source galaxy sample*. Arxiv e-print (2025) [2502.17675](#).
165. D. Anbajagane, **C. Chang***... et al., *The DECADE cosmic shear project I: A new weak lensing shape catalog of 107 million galaxies*. Arxiv e-print (2025) [2502.17674](#).
164. K. Bechtol, ...**C. Chang**... et al., *Dark Energy Survey Year 6 Results: Photometric Data Set for Cosmology*. Arxiv e-print (2025) [2501.05739](#).
163. M. Yamamoto, ...**C. Chang**... et al., *Dark Energy Survey Year 6 Results: Cell-based Coadds and Metadetection Weak Lensing Shape Catalogue*. Arxiv e-print (2025) [2501.05665](#).
162. A. Campos, ...**C. Chang**... et al., *Enhancing weak lensing redshift distribution characterization by optimizing the Dark Energy Survey Self-Organizing Map Photo-z method*. Arxiv e-print (2024) [2408.00922](#).
161. E. Krause, ...**C. Chang**... et al., *Dark Energy Survey Year 3 Results: Multi-Probe Modeling Strategy and Validation*. Arxiv e-print (2021) [2105.13548](#).
160. C. Davis, ...**C. Chang**... et al., *Dark Energy Survey Year 1 Results: Cross-Correlation Redshifts in the DES – Calibration of the Weak Lensing Source Redshift Distributions*. ArXiv e-prints (2017) [1710.02517](#).
159. E. Krause, ...**C. Chang**... et al., *Dark Energy Survey Year 1 Results: Multi-Probe Methodology and Simulated Likelihood Analyses*. ArXiv e-prints (2017) [1706.09359](#).
158. G. Giannini, ...**C. Chang**... et al., *Dark Energy Survey Year 6 results: Redshift calibration of the MagLim++ lens sample*. PRD **114**, 023520 (2026) [2509.07964](#).
157. C. To, **C. Chang***... et al., *First detection of weak lensing around spectroscopically confirmed low-mass galaxies*. PRD **114**, 023040 (2026) [2509.20458](#).
156. M. Gatti, D. Anbajagane, **C. Chang***... et al., *DECADE+DES Y3 weak lensing mass map: A 13,000 deg² view of cosmic structure from 270 million galaxies*. PRD **113**, L081303 (2026) [2509.03798](#).

REFEREED
JOURNAL
PUBLICATIONS

155. G. Zacharegkas, **C. Chang***, J. Prat... et al., *Constraining the Stellar-to-Halo Mass Relation with Galaxy Clustering and Weak Lensing from DES Year 3 Data*. *OJAp* **9**, 55046 (2026).
154. G. Giannini, ...**C. Chang**... et al., *Dark Energy Survey Year 6 results: Galaxy-galaxy lensing*. *PRD* **113**, 103503 (2026) [2601.15175](#).
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