

# ZHOU, CONGHAO

UC Santa Cruz  
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## CONTACT

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## RESEARCH INTERESTS

dark matter · gravitational lensing · galaxy clusters · large scale structure ·  
multi-wavelength cosmology

## EDUCATION

	University of California, Santa Cruz
2020 - Present	Ph.D. in Physics
2021 on Leave	Physics Department
	Thesis: <i>TBD</i>
	Committee: TESLA E. JELTEMA, ALEXIE S. LEAUTHAUD
	Duke University
2020	B.A. in Physics with Highest Distinction
	Department of Physics
	Thesis: <i>Intrinsic Alignment of redMaPPer Clusters in the Dark Energy Survey</i>
	Committee: MICHAEL A. TROXEL, CHRISTOPHER W. WALTER, ROBERT L. WOLPERT

## LEAD PUBLICATION

1. Constraining optical selection effect with DES and SPT, in prep.  
C. ZHOU, S. GRANDIS, H.Y. WU, A.N. SALCEDO et al.
2. Halo mass tracing stellar mass distribution in IllustrisTNG, in prep.  
C. ZHOU, A.S. LEAUTHAUD, B. DIEMER, S. HUANG, S. XU. et al.
3. Resposne Bias in Cosmic Shear, in prep.  
C. ZHOU & M.R. BECKER
4. Forecasting the constraints on optical selection bias and projection effects of galaxy cluster lensing with multiwavelength data, [arXiv](#)  
C. ZHOU, H.Y WU, A.N. SALCEDO, S. GRANDIS, T.E. JELTEMA, A.S. LEAUTHAUD et al.
5. The intrinsic alignment of red galaxies in DES Y1 redMaPPer galaxy clusters , [MNRAS](#)  
C. ZHOU, A. TONG, M.A. TROXEL, J. BLAZEK, C. LIN et al.

## CONTRIBUTED PUBLICATION

1. Dark Energy Survey Year 3 Results: Deep Field Optical + Near-Infrared Images and Catalogue , [MNRAS](#)  
W.G. HARTLEY, A. CHOI, A. AMON et al.

## TALKS

oct. 2023                  Cosmology Seminar, Tsinghua University

oct. 2023

Joint Stony Brook University / Brookhaven National Lab Cosmology Seminar

#### PROFESSIONAL MEMBERSHIP

2020 - Present	Student Member, LSST Dark Energy Science Collaboration
2020 - Present	Student Member, Dark Energy Spectroscopic Instrument
2018 - Present	Student Member, Dark Energy Survey

#### OUTREACH

2023	Starlight Over Street Light
2022	UC Santa Cruz Physics Outreach Taskforce
2022	Science Internship Program Mentor
2022	UC Santa Cruz Physics Mentoring Program Mentor

#### SERVICE

jul. 2023 - present	Organizer, BCG Seminar, Boise State
sep. 2023 - present	Organizer, CosmoGal Seminar, UC Santa Cruz
jan. 2023	LOC, APS Conference for Undergraduate Women in Physics at UC Santa Cruz
aug. 2022	SOC, LSST DESC 2022 Chicago Meeting
apr. 2022 - present	DES Early Career Scientists Committee
jul. 2022 - present	LSST DESC Mentoring Committee

#### TEACHING

2022 Fall	Quantum Mechanics (TA)
2022 Summer	Intermediate Physics Laboratory (TA)
2022 Spring	Advanced Astrophysics Laboratory (TA)
4 times	Introductory Physics Laboratory (TA)

February 21, 2024