# ZHOU, CONGHAO

UC Santa Cruz Physics Department 1156 High Street Santa Cruz, CA 95064

#### CONTACT

email zhou.conghao@ucsc.edu

website https://zch.info

#### RESEARCH INTERESTS

Dark Matter  $\cdot$  Gravitational Lensing  $\cdot$  Galaxy Clusters  $\cdot$  Intrinsic Alignment Galaxy Morphology  $\cdot$  Statistical Methods

#### **EDUCATION**

University of California, Santa Cruz

2020 - Present 2021 on Leave Ph.D. in Physics Physics Department

Thesis: TBD

**Duke University** 

2020

B.A. in Physics with Highest Distinction

Department of Physics

Thesis: Intrinsic Alignment in the redMaPPer Clusters in the Dark Energy Survey

Advisor: Professor Michael A. Troxel

#### PUBLICATIONS IN PREPARATION

The Intrinsic Alignment of Red Galaxies in DES Y1 redMaPPer Galaxy Clusters

In Review

C. Zhou, A. Tong, M. Troxel, J. Blazek, C.Lin et al.

Modelling the Selection Effect Bias in the Dark Energy Survey Y<sub>3</sub> Clusters with

AbacusCosmos and the South Pole Telescope

Expected 2022

C. Zноu et al.

High Redshift Star-forming Clumps in NewHorizon and FIRE Simulations

Expected 2022

C. Zноu et al.

### MENTORING

### Science Internship Program

2022 Summer

In this program, I will work with a group of high school students on the Dark Energy Survey Y6 Modeling Choice for 8 Weeks

UC Santa Cruz SPS Mentor

2022 Spring

I am mentoring UC Santa Cruz undergraduate Neil Goswami on graduate school application and research topic choice

### OUTREACH

## UC Santa Cruz Physics Outreach Taskforce

I am a member of a team at UC Santa Cruz dedicated to broaden the impact of physics research and serve the underprivledged communities in physics.

SERVICE

2022 Summer LSST DESC 2022 Chicago Meeting Science Origanizing Committee

2022 DES Early Career Scientists Committee

TEACHING

2022 Summer Intermediate Physics Laboratory (TA)

2022 Spring Advanced Astrophysics Laboratory (TA)

twice Introductory Physics Laboratory (TA2)

July 20, 2022