# XIHE LIU

+86 19588930656 • foisliu1054@gmail.com • github.com/foisliu • foisliu.github.io/resume/ • Santiago, 8320000, Chile

### **EDUCATION**

**SHANDONG UNIVERSITY** | *Undergraduate in School of Physics* 

09/2021 - Present

· Coursework - Advanced Mathematics, Methods of Mathematical Physics, Theoretical Mechanics, Electrodynamics, Quantum mechanics

### RESEARCH INTEREST

Observation ISM & Star Formation Using Continuum and Molecular Lines

Simulation The Magnetic Field and Filament Structure of Star Formation Region

### RESEARCH EXPERIENCE

SHANGHAI ASTRONOMICAL OBSERVATORY, CHINESE ACADEMY OF SCIENCES | Advisor: Dr. Xing Lu

09/2022 - 09/2023

• Analysis of Dense Cores and Filamentary Structures within the CMZ Cloud e Using ALMA Band 3 & 6

SHANGHAI ASTRONOMICAL OBSERVATORY, CHINESE ACADEMY OF SCIENCES | Advisor: Prof. Pakshing Li

06/2023 - 01/2024

· A New Calibration Using Data from a Large-scale, High-resolution Simulation Using ORION2 on the Formation of Filamentary Dark Clouds

## **DEPARTMENT OF ASTRONOMY, UNIVERSIDAD DE CHILE** | Advisor: Prof. Guido Garay

03/2024 - Present

 ALMA Three-millimeter Observations of Massive Star-forming regions (ATOMS) - Hub-Filament Structures of ATOMS Sources 25, 63, 119 and 123

### SKILLS

Language Python (Astropy, Astrodendro, Matplotlib, Pandas), C, MATLAB

Software & Programming VS Code, CASA, CARTA, DS9, Vislt, Mathematica, ORION2

English CET4, CET6, ITLS, GRE Phys

### Conferences and Presentations

THE 7TH CHINA SKA SUMMER SCHOOL

09/2022

**SOFIA SCHOOL 2023** 

04/2023 05/2023

2023 SUBMILLIMETER ARRAY INTERFEROMETRY SCHOOL

09/2023

2023 ANNUAL MEETING OF THE CHINESE ASTRONOMICAL SOCIETY

Weihai, China

Participate without Report

09/2023

2023 PEKING UNIVERSITY UNDERGRADUATE ASTRONOMY SYMPOSIUM Oral Presentation

Beijing, China

2023 ANNUAL SYMPOSIUM ON MOLECULAR CLOUDS AND STAR FORMATION Poster (DUET: The Band3 and Band6 Continuum Emission and Dense Cores in the Dust Ridge Cloud 'e') 10/2023

Chongqing, China 06/2024

244TH MEETING OF THE AMERICAN ASTRONOMICAL SOCIETY

Oral Presentation

Madsion, WI, USA

### Honors and Awards

Linbridge Scholarship 2023 Peking University Undergraduate Astronomy Symposium

First Prize Contemporary Undergraduate Mathematical Contest in Modeling

Third Prize Chinese undergraduate Astronomical Innovation Contest

#### COMMUNITY INVOLVEMENT

1 | Astro Science Popularization

2021 - 2022

- · Lead of Teaching Astronomy Popular Science Lesson to the Students of Primary School

  - 2 | Astrophysics Party 2022 - Present
- · Establish the First National Astronomical Academic Community in China (similar to Astrobites) Specifically Designed for Undergraduate Students