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## EDUCATION

### •Nanjing University, Ph.D. student

2020–today

*School of Astronomy & Space Science, China*

### •Shandong University, BSc.

2016–2020

*School of Physics, China*

## PAPERS

### •First detection of CO isotopologues in a high-redshift main-sequence galaxy: evidence of a top-heavy stellar initial mass function

*the Astrophysical Journal*

2024-08

**CONTRIBUTORS:** Zi-Yi Guo; Zhi-Yu Zhang; Zhiqiang Yan; Eda Gjergo; Rob Ivison; Allison Man; Xiaoting Fu; Yong Shi.

### •A SPectroscopic survey of biased halos In the Reionization Era (ASPIRE): Impact of Galaxies on the Circumgalactic Medium Metal Enrichment at $z > 6$ Using the JWST and VLT

*The Astrophysical Journal Letters*

2024-03

**CONTRIBUTORS:** Zou Siwei; Cai Zheng; Wang Feige; Fan Xiaohui; Champagne Jaclyn B.; Hennawi Joseph F.; Schindler Jan-Torge; Farina Emanuele Paolo; Yang Jinyi; Inayoshi Kohei; Bañados Eduardo; Bosman Sarah E. I.; Li Zihao; Lin Xiaojing; Wu Yunjing; Sun Fengwu; Guo Ziyi; Kulkarni Girish; Habouzit Mélanie; Charlot Stephane; Chevallard Jacopo; Connor Thomas; Eilers Anna-Christina; Jiang Linhua; Jin Xiangyu; Kakiichi Koki; Li Mingyu; Meyer Romain A.; Walter Fabian; Zhang Huanian

### • $\alpha$ -enhanced astrochemistry: the carbon cycle in extreme galactic conditions

*Monthly Notices of the Royal Astronomical Society*

2024-01

**CONTRIBUTORS:** Thomas G. Bisbas; Zhi-Yu Zhang; Eda Gjergo; Ying-He Zhao; Gan Luo; Donghui Quan; Xue-Jian Jiang; Yichen Sun; Theodoros Topkaras; Di Li; Ziyi Guo

### •Properties of Dense Molecular Gas along the Major Axis of M82

*The Astrophysical Journal*

2022-07-01

**CONTRIBUTORS:** Fei Li; Zhi-Yu Zhang; Junzhi Wang; Feng Gao; Shanghuo Li; Jing Zhou; Yichen Sun; Zi-Yi Guo; Shu Liu.

## TALKS

### •Astronomy Talk

2024-03

*ORGANIZER: Istituto Nazionale di Astrofisica, Osservatorio di Astrofisica e Scienza dello Spazio di Bologna*

First detection of CO isotopologues in a high-redshift main-sequence galaxy: evidence of a top-heavy stellar initial mass function

### •Cosmic Threads: Interlinking the stellar Initial Mass Function from Star-birth to Galaxies

2024-03

*ORGANIZER: Sexten Center for Astrophysics (SCfA) "Riccardo Giacconi"*

First detection of CO isotopologues in a high-redshift main-sequence galaxy: evidence of a top-heavy stellar initial mass function

### •The 3rd International Workshop on Origin of Elements and Cosmic Evolution

2023-11

*ORGANIZER: Beihang University; International research Institute for Multidisciplinary Science; Institute of Nuclear Astrophysics of China; COSNAP*

From Stellar yield to Evolution of the Universe – The First detection of CO isotopologues in high- $z$  Main Sequence galaxy: Evidence of a top-heavy IMF

### •Nearby and Distant Star Formation Conference

2023-07

*ORGANIZER: Yunnan Observatories, Chinese Academy of Sciences*

The First detection of CO isotopologues in high- $z$  Main Sequence galaxy: Indications of a Top-heavy IMF

### •Seminar

2023-03

*ORGANIZER: Tsinghua University*

The First detection of CO isotopologues in high- $z$  Main Sequence galaxy: Indicate top-heavy IMF

### •Gravitational Lensing Spring Conference

2023-03

*ORGANIZER: Beijing Normal University*

Constrain the Initial Mass Function in Main-Sequence Galaxies at  $z \sim 2$

ACHIEVEMENTS

- Tiangong Scholarship2024
- Institute for nuclear astrophysics of China award for young scientist2023
- For outstanding presentation at the Pre-Workshop of the 3rd International Workshop on ‘Origin of Elements and Cosmic Evolution’.

TECHNICAL SKILLS AND INTERESTS

Languages: Chinese, English, python

Software Skills: GalCEM, NuPyCEE, CASA

Areas of Interest: Galactic chemical evolution; high-z galaxies; ALMA observations