# Qingyang Li

Department of Astronomy Shanghai Jiao Tong University Shanghai 200240, China

Email: qingyli@sjtu.edu.cn Website: https://liqingy.github.io/

## **EDUCATION**

<b>Ph.D</b>   <i>Astronomy</i>	Sept. 2018 – June. 2024
Shanghai Jiao Tong University, Advisor: Xiaohu Yang, Jiaxin Han.	Shanghai, China
<b>Ph.D Visitor</b>   <i>Astronomy</i> Edinburgh of University, Supervisor: Romeel Dave, Weiguang Cui	Dec. 2022 – June. 2023 Edinburgh, UK
Bachelor   Physics	Sept. 2014 – June. 2018
Sichuan University	Chengdu, Sichuan

### RESEARCH AREA

Intracluster Medium, Galaxy dynamics, Groups and protoclusters, Machine learning, High-redshift galaxy

#### TALKS AND PRESENTATIONS

SIMBA collaboration meeting	May. 2023
ESA/ESAC Galaxy Cluster Mass meeting	Sept. 2021
The Three Hundred collaboration meeting	July. 2021
Annual meeting of Chinese astronomy	Oct. 2020
The Three Hundred collaboration meeting	July. 2020

### **HONORS AND AWARDS**

National Scholarship	2022
"Yangyang" astronomy scholarship	2022
Outstanding student award of two key laboratories	2021
Ruiyuan - Sequoia Talent Development Fund Scholarship	2021
Outstanding student award of two key laboratories	2020
Shanghai Jiaotong University Oppotech Scholarship	2020

## TEACHING EXPERIENCE

College physics	Spring 2019
Teaching Assistant, Department of Physics and Astronomy	Shanghai Jiao Tong University
An Introduction of astrophysics Teaching Assistant, Department of Physics and Astronomy	Spring 2020 Shanghai Jiao Tong University
College physics experiment	Fall 2020
Teaching Assistant, Department of Physics and Astronomy	Shanghai Jiao Tong University

## **PUBLICATIONS**

## First author

- 1. **Qingyang Li** et al. THE THREE HUNDRED Project: the evolution of physical baryon profiles. *MNRAS*, 523(1):1228–1246, July 2023
- 2. **Qingyang Li** et al. Groups and Protocluster Candidates in the CLAUDS and HSC-SSP Joint Deep Surveys. *ApJ*, 933(1):9, July 2022

- 3. **Qingyang Li** et al. What to expect from dynamical modelling of cluster haloes II. Investigating dynamical state indicators with Random Forest. *MNRAS*, 514(4):5890–5904, August 2022
- 4. **Qingyang Li**, Jiaxin Han, Wenting Wang, Weiguang Cui, Zhaozhou Li, and Xiaohu Yang. What to expect from dynamical modelling of cluster haloes I. The information content of different dynamical tracers. *MNRAS*, 505(3):3907–3922, August 2021
- 5. **Qingyang Li** et al. The Three Hundred project: the stellar and gas profiles. *MNRAS*, 495(3):2930–2948, July 2020

### Co-author

- 1. Yun-Liang Zheng, Xiaohu Yang, Min He, Shi-Yin Shen, and Xuejie Li, **Qingyang Li**. Measuring the X-ray luminosities of DESI groups from eROSITA Final Equatorial-Depth Survey I. X-ray luminosity-halo mass scaling relation. *MNRAS*, 523(4):4909–4922, August 2023
- 2. Kai Wang, Yangyao Chen, **Qingyang Li**, and Xiaohu Yang. Late-formed haloes prefer to host quiescent central galaxies I. Observational results. *MNRAS*, 522(2):3188–3200, June 2023
- 3. Zitong Wang, Feng Shi, Xiaohu Yang, **Qingyang Li**, Yanming Liu, and Xiaoping Li. DarkAI: I. Mapping the large-scale density field of dark matter using AI. *arXiv e-prints*, page arXiv:2305.11431, May 2023
- 4. Eric J. Baxter, Shivam Pandey, Susmita Adhikari, Weiguang Cui, Tae-hyeon Shin, **Qingyang Li**, and Elena Rasia. The impact of halo concentration on the Sunyaev Zel'dovich effect signal from massive galaxy clusters. *arXiv e-prints*, page arXiv:2304.08731, April 2023
- 5. Jiaqi Wang, Xiaohu Yang, Jun Zhang, Hekun Li, Matthew Fong, Haojie Xu, Min He, Yizhou Gu, Wentao Luo, Fuyu Dong, Yirong Wang, **Qingyang Li**, Antonios Katsianis, Haoran Wang, Zhi Shen, Pedro Alonso Vaquero, Cong Liu, Yiqi Huang, and Zhenjie Liu. Halo Properties and Mass Functions of Groups/Clusters from the DESI Legacy Imaging Surveys DR9. *ApJ*, 936(2):161, September 2022
- 6. Rui Shi, Wenting Wang, Zhaozhou Li, Jiaxin Han, Jingjing Shi, Vicente Rodriguez-Gomez, Yingjie Peng, and **Qingyang Li**. A machine learning approach to infer the accreted stellar mass fractions of central galaxies in the TNG100 simulation. *MNRAS*, 515(3):3938–3955, September 2022
- 7. Weiguang Cui, Romeel Dave, Alexander Knebe, Elena Rasia, Meghan Gray, Frazer Pearce, Chris Power, Gustavo Yepes, Dhayaa Anbajagane, Daniel Ceverino, Ana Contreras-Santos, Daniel de Andres, Marco De Petris, Stefano Ettori, Roan Haggar, **Qingyang Li**, Yang Wang, Xiaohu Yang, Stefano Borgani, Klaus Dolag, Ying Zu, Ulrike Kuchner, Rodrigo Cañas, Antonio Ferragamo, and Giulia Gianfagna. THE THREE HUNDRED project: The GIZMO-SIMBA run. *MNRAS*, 514(1):977–996, July 2022
- 8. Xiaohu Yang, Haojie Xu, Min He, Yizhou Gu, Antonios Katsianis, Jiacheng Meng, Feng Shi, Hu Zou, Youcai Zhang, Chengze Liu, Zhaoyu Wang, Fuyu Dong, Yi Lu, **Qingyang Li**, Yangyao Chen, Huiyuan Wang, Houjun Mo, Jian Fu, Hong Guo, Alexie Leauthaud, Yu Luo, Jun Zhang, and Ying Zu. An Extended Halo-based Group/Cluster Finder: Application to the DESI Legacy Imaging Surveys DR8. *ApJ*, 909(2):143, March 2021