Shun-Sheng Li

PhD candidate

https://lshuns.github.io/

Leiden Observatory 2333 CA Leiden the Netherlands ssli@strw.leidenuniv.nl

RESEARCH KEYWORDS

Gravitational lensing: strong, weak and micro

Galaxies: halos, groups and clusters

Cosmology: cosmological parameters, dark matter and large-scale structure of universe

Methods: data analysis, observational and statistical Techniques: image processing and photometric

RESEARCH EXPERIENCE

Leiden Observatory, Leiden

2019 - present

Research Assistant

- Dark matter properties with galaxy-galaxy lensing (in prep.)
- Cosmology with cosmic shear (in prep.)
- Weak lensing calibration (arXiv:2210.07163)
- Consistency test for cosmic shear analysis (arXiv:2009.00367)

National Astronomical Observatory of China, Beijing

2017 - 2019

Research Assistant

- Data analysis of microlensing events (arXiv:1904.07718, arXiv:1904.11204, arXiv:1912.00038)
- Gravitational lensing of gravitational waves (arXiv:1802.05089, arXiv:1810.00003)

EDUCATION

Leiden University, Leiden

2019 - 2023 (expected)

PhD in Astrophysics

- Thesis: TBD

- Advisors: Prof. Koen Kuijken & Prof. Henk Hoekstra

University of Chinese Academy of Sciences, Beijing

2016 - 2019

MSc in Astrophysicss

- Thesis: "Gravitational Lensing of Gravitational Waves"

Advisor: Prof. Shude Mao

Nanjing University, Nanjing

2012 - 2016

BSc in Astronomy

TEACHING EXPERIENCE

TEACHING ASSISTANT

• Large-Scale Structure and Galaxy Formation Master's course, Leiden University 2022

• Gravitational Lensing

Master's course, Leiden University

2020

(Co-)supervision

• Margherita Grespan (2020), Shiyang Zhang (2022) MSc students, Leiden University

PROFESSIONAL EXPERIENCE

Collaboration

• Kilo-Degree Survey

KiDS-Legacy calibration team, galaxy-galaxy lensing working group

2019-present

• Euclid Consortium 2020—present

Flagship 2.0 validation team, weak lensing science working group

SCHOLARSHIPS AND AWARDS

• National Scholarship for Graduate Students of China

2018

• People's Scholarship

2014, 2015

PUBLICATIONS

Total 6 published, 1 submitted (5 first/second-author). A full list is available at https://lshuns.github.io/publications/

SELECTED

• KiDS-Legacy calibration: Unifying shear and redshift calibration with the SKiLLS multi-band image simulations

S.-S. Li, K. Kuijken, H. Hoekstra, et al., 2022, submitted to A&A (arXiv)

- OGLE-2017-BLG-1186: First Application of Asteroseismology and Gaussian Processes to Microlensing S.-S. Li, W. Zang, A. Udalski, et al., 2019, MNRAS, 488, 3308 (adsabs)
- Gravitational Lensing of Gravitational Waves: A Statistical Perspective S.-S. Li, S. Mao, Y. Zhao, et al., 2018, MNRAS, 476, 2220 (adsabs)

Presentations

Total 8 (2 invited).

A full list is available at https://lshuns.github.io/talks/