Anowar J. Shajib

Contact Information

Department of Physics and Astronomy
University of California, Los Angeles
430 Portola Plaza, Box 951547
Los Angeles, CA 90095 USA

Office: Knudsen Hall 3-145T
Phone: (213) 271-7056
E-mail: ajshajib@astro.ucla.edu
Web: www.astro.ucla.edu/~ajshajib

Research Interests

Gravitational Lensing, Observational Cosmology

Education

University of California, Los Angeles, USA

Ph.D. Candidate, Astronomy, March 2017 (expected graduation date: June 2020)

- Dissertation Topic: "Shining light on the dark energy with time-delay cosmography"
- Advisor: Prof. Tommaso Treu

M.S., Astronomy, June 2016

- Advisor: Prof. Edward L. Wright

The University of Tokyo, Japan

B.S., Physics, March 2014

Honors and Awards

Graduate Student Travel Grant, *UCLA*, 2017, $2000

Astronomy Division Fellowship, University of California, Los Angeles, 2014-2015

MEXT[1] **Scholarship**, 2009-2014

Academic Experience

University of California, Los Angeles, USA

Graduate Student **October 2014 - present**

Includes current Ph.D. research, Ph.D. and Masters level coursework and research.

Guest Lecturer

- Physics 127 - General Relativity (Spring 2015)
- Astro 81 - Astronomy I: Stars and Nebulae (Winter 2016)

Teaching Assistant

- Astronomy 3 - Nature of Universe (Fall 2014)
- Physics 1C - Electrodynamics, Optics and Special Relativity (Winter 2015)
- Physics 127 - General Relativity (Spring 2015)
- Physics 6C - Physics for Life Sciences Majors: Light, Fluids, Thermodynamics, Modern Physics (Fall 2015)
- Astronomy 81 - Astrophysics I: Stars and Nebulae (Winter 2016)
- Astronomy 140 - Stellar Systems and Cosmology (Spring 2016)
- Physics 12 - Physics of Sustainable Energy (Winter 2017)

Publications

First Author Publications

1. Shajib, A. J. and Wright, E. L. Measurement of the integrated Sachs-Wolfe effect using the AllWISE data release. ApJ, 827:116, 2016.

[1] Ministry of Education, Culture, Sports, Science and Technology, Government of Japan

2. Shajib, A. J., Treu, T., and Agnello, A. Improving time-delay cosmography with spatially resolved kinematics. MNRAS, 473, 210-226, 2018.
3. Shajib, A. J., et al. Is every strong lens model unhappy in its own way? Uniform modelling of a sample of ten quadruply imaged quasars. In preparation.

Contributing Author Publications

1. Williams, P. R., et al. Discovery of three strongly lensed quasars in the Sloan Digital Sky Survey. MNRAS: Letters, sly043, 2018.
2. Ding, X., Treu, T., **Shajib, A. J.**, et al. Time Delay Lens Modeling Challenge: I. Experimental Design. arxiv:1801.01506, 2018.
3. Molina, E., et al. More massive galaxies are more massive: luminous and dark matter in small-separation quasar lenses. In preparation.

Conference Presentations

1. Shajib, A. J., Treu, T., and Agnello, A. 2017. Improving time-delay cosmography with spatially resolved kinematics. Strong Lensing by Galaxies and Clusters, Aosta, Italy, 2017.
2. Shajib, A. J., Treu, T., and Agnello, A. 2018. Improving time-delay cosmography with spatially resolved kinematics in the ELT era. Shedding Light on the Dark Universe with Extremely Large Telescopes, UCLA, USA, 2018.

Approved Observing Proposals (CoI)

Keck U053(2017A), U032(2017B), U011(2018A). PI: Treu. Dark energy with gravitational time-delay: OSIRIS spectroscopy of lensing galaxies.

Observing Experience

OSIRIS, Keck I, 6.5 nights,
NIRC2, Keck II, 3 nights.

Data Analysis Experience

Keck (OSIRIS, NIRC2), *HST*, *WISE*, *WMAP*, *Planck*, SDSS.

Outreach

Public talk, Title: The Story of You. UCLA Planetarium, 2014.
Star show, UCLA Planetarium, 2014, 2015.
Astronomy Live!, visited K-12 schools to perform various demos as part of the UCLA Astronomy outreach program.
Exploring Your Universe, performed various demos in UCLA's annual science festival, 2014-17.

Computer Skills

Programming Languages: Python, C, C++, PHP, SQL, JavaScript.
Astronomy software: IRAF, PyRAF, SExtractor, DS9, Lenstronomy.

Positions of Responsibility

Captain and Coach, The University of Tokyo Cricket Club, 2012-13
College prefect, Sylhet Cadet College, 2006-07