Publication list Anowar J. Shajib

## First/second-author publications (†: Mentee)

1. **Shajib**, **A. J.**, et al. Strong Lensing by Galaxies. Invited review article for ISSI workshop on strong lensing, to be submitted to Space Science Reviews. arXiv:2210.10790, 2022.

- 2. Shajib, A. J., et al. LensingETC: a tool to optimize multi-filter imaging campaigns of galaxy-scale strong lensing systems. ApJ, 938, 141, 2022.
- 3. Shajib, A. J., et al. TDCOSMO. IX. Systematic comparison between lens modelling software programs: time delay prediction for WGD 2038-4008. A&A, 667, A123, 2022.
- 4. Birrer, S., **Shajib**, **A. J.**, et al. lenstronomy II: A gravitational lensing software ecosystem. Journal of Open Source Software, 6(62), 3283, 2021.
- 5. Shajib, A. J., et al. Dark matter haloes of massive elliptical galaxies at  $z \sim 0.2$  are well described by the Navarro-Frenk-White profile. MNRAS, 503, 2, 2380-2405, 2021.
- 6. **Shajib**, **A. J.**, Molina, E.†, et al. High-resolution imaging follow-up of doubly imaged quasars. MNRAS, 503, 2, 1557-1567, 2021.
- 7. Birrer, S., **Shajib**, **A. J.**, et al. TDCOSMO IV: Hierarchical time-delay cosmography joint inference of the Hubble constant and galaxy density profiles. A&A 643, A165, 2020.
- 8. **Shajib, A. J.**, et al. STRIDES: A 3.9 per cent measurement of the Hubble constant from the strong lens system DES J0408–5354. MNRAS, 494, 6072–6102, 2020.
- 9. **Shajib, A. J.** Unified lensing and kinematic analysis for *any* elliptical mass profile. MNRAS, 488, 1387–1400, 2019.
- 10. **Shajib**, **A. J.**, et al. Is every strong lens model unhappy in its own way? Uniform modelling of a sample of 13 quadruply+ imaged quasars. MNRAS, 483, 5649–5671, 2019.
- 11. **Shajib, A. J.**, Treu, T., and Agnello, A. Improving time-delay cosmography with spatially resolved kinematics. MNRAS, 473, 210–226, 2018.
- 12. **Shajib**, **A. J.** and Wright, E. L. Measurement of the integrated Sachs-Wolfe effect using the AllWISE data release. ApJ, 827:116 (9pp), 2016.

## nth-author publications

- 1. Pierel, J. D. R., et al. LensWatch: I. Resolved HST Observations and Constraints on the Strongly-Lensed Type Ia Supernova 2022qmx ("SN Zwicky"). arXiv:2211.03772, 2022.
- 2. Zoborowski, E., et al. Identification of Galaxy-Galaxy Strong Lens Candidates in the DECam Local Volume Exploration Survey Using Machine Learning. arXiv:2210.10802, 2022.
- 3. Birrer, S., Millon, M., Sluse, D., **Shajib, A.**, et al. Time-Delay Cosmography: Measuring the Hubble Constant and other cosmological parameters with strong gravitational lensing. arXiv:2210.10833, 2022.
- Mozumdar, P., et al. TDCOSMO. XII. New lensing galaxy redshift and velocity dispersion measurements from Keck spectroscopy of eight lensed quasar systems. arXiv:2209.14320, 2022.

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5. Ertl, S., et al. TDCOSMO XI. Automated Modeling of 9 Strongly Lensed Quasars and Comparison Between Lens Modeling Software. arXiv:2209.03094, 2022.

- 6. Lemon, C., et al. Gravitationally lensed quasars in Gaia IV. 150 new lenses, quasar pairs, and projected quasars. arXiv:2206.07714, 2022.
- 7. Schmidt, T., Treu, T., Birrer, S., **Shajib, A. J.**, et al. STRIDES: Automated uniform models for 30 quadruply imaged quasars. arXiv:2206.04696, 2022.
- 8. Morgan, R., et al. DeepZipper II: Searching for Lensed Supernovae in Dark Energy Survey Data with Deep Learning. arXiv:2204.05924, 2022.
- 9. Akhazhanov, A., et al. Finding quadruply imaged quasars with machine learning. I. Methods. MNRAS, 513, 2, 2407-2421, 2022.
- 10. Birrer, S., Dhawan. S., and **Shajib**, **A. J.** The Hubble constant from strongly lensed supernovae with standardizable magnifications. ApJ, 924, 1, 2, 2022.
- 11. Ding, X., et al. Time Delay Lens Modelling Challenge. MNRAS, 503, 1096-1123, 2021.
- 12. Buckley-Geer, E. J., et al. STRIDES: Spectroscopic and photometric characterization of the environment and effects of mass along the line of sight to the gravitational lenses DES J0408-5354 and WGD 2038-4008. MNRAS, 498, 3, 3241-3274, 2020.
- 13. Lemon, C., et al. The STRong lensing Insights into the Dark Energy Survey (STRIDES) 2017/2018 follow-up campaign: Discovery of 10 lensed quasars and 10 quasar pairs. MNRAS, 494, 3, 3491-3511, 2020.
- 14. Millon, M., et al. TDCOSMO I. An exploration of systematic uncertainties in the inference of  $H_0$  from time-delay cosmography. A&A, 639, A101, July 2020.
- 15. Wong, C. K., et al. H0LiCOW XIII. A 2.4 per cent measurement of  $H_0$  from lensed quasars:  $5.3\sigma$  tension between early- and late-Universe probes. In press (MNRAS), MNRAS, 498, 1, 1420-1439, 2020.
- 16. Chen, G. C.-F., et al. A SHARP view of H0LiCOW:  $H_0$  from three time-delay gravitational lens systems with adaptive optics imaging. MNRAS, 490, 1743–1773, 2019.
- 17. Taubenberger, S., et al. The Hubble Constant determined through an inverse distance ladder including quasar time delays and Type Ia supernovae. A&A, 628, L7, 2019.
- 18. Rusu, C. E., et al. H0LiCOW XII. Lens mass model of WFI2033-4723 and blind measurement of its time-delay distance and  $H_0$ . MNRAS, 498, 1, 2020, 1420-1439, 2020.
- 19. Sluse, D., et al. H0LiCOW X: Spectroscopic/imaging survey and galaxy-group identification around the strong gravitational lens system WFI2033-4723. MNRAS, 490, 613–633, 2019.
- 20. Birrer, S., et al. H0LiCOW IX. Cosmographic analysis of the doubly imaged quasar SDSS 1206+4332 and a new measurement of the Hubble constant. MNRAS, 484, 4726-4753, 2019.
- 21. Chen, G. C.-F., et al. Constraining the microlensing effect on time delays with new time-delay prediction model in  $H_0$  measurements. MNRAS, 481, 1115–1125, 2018.

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22. Williams, P. R., et al. Discovery of three strongly lensed quasars in the Sloan Digital Sky Survey. MNRAS: Letters, 477, L70–L74, 2018.

## Non-refereed papers

- 1. Di Valentino, E., et al. Snowmass2021 Letter of interest cosmology intertwined IV: The age of the universe and its curvature. Astroparticle Physics, Volume 131, 102607, 2021.
- 2. Di Valentino, E., et al. Snowmass2021 Letter of interest cosmology intertwined III:  $f\sigma_8$  and  $S_8$ . Astroparticle Physics, Volume 131, 102604, 2021.
- 3. Di Valentino, E., et al. Snowmass2021 Letter of interest cosmology intertwined II: The Hubble constant tension. Astroparticle Physics, Volume 131, 102605, 2021.
- 4. Di Valentino, E., et al. Snowmass2021 Letter of interest cosmology intertwined I: Perspectives for the next decade Astroparticle Physics, Volume 131, 102606, 2021.
- 5. Beaton, R. L., et al. Measuring the Hubble Constant Near and Far in the Era of ELT's. BAAS 51(3) 456, 2019.
- 6. Ding, X., Treu, T., **Shajib**, **A. J.**, et al. Time Delay Lens Modelling Challenge: I. Experimental Design. arXiv:1801.01506, 2018.