

First-author publications (†: Mentee)

1. **Shajib, A. J.**, et al. TDCOSMO. XIII. Improved Hubble constant measurement from lensing time delays using spatially resolved stellar kinematics of the lens galaxy. [arXiv:2301.02656, 2023](#).
2. **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](#).
3. **Shajib, A. J.**, et al. LensingETC: a tool to optimize multi-filter imaging campaigns of galaxy-scale strong lensing systems. [ApJ, 938, 141, 2022](#).
4. **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](#).
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. **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](#).
8. **Shajib, A. J.** Unified lensing and kinematic analysis for *any* elliptical mass profile. [MNRAS, 488, 1387–1400, 2019](#).
9. **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](#).
10. **Shajib, A. J.**, Treu, T., and Agnello, A. Improving time-delay cosmography with spatially resolved kinematics. [MNRAS, 473, 210–226, 2018](#).
11. **Shajib, A. J.** and Wright, E. L. Measurement of the integrated Sachs-Wolfe effect using the ALLWISE data release. [ApJ, 827:116 \(9pp\), 2016](#).

Second-author publications

1. Birrer, S., **Shajib, A. J.**, et al. lenstronomy II: A gravitational lensing software ecosystem. [Journal of Open Source Software, 6\(62\), 3283, 2021](#).
2. 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](#).

Other co-authored 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. Zaborowski, 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](#).

4. 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](#).
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 σ 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.
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.