

X48a **TDCOSMO: Updated constraints on the Hubble constant from time-delay cosmography**

Kenneth C. Wong (University of Tokyo), TDCOSMO Collaboration

We present the latest cosmological constraints from multiply-imaged gravitationally lensed quasars by the TDCOSMO collaboration. The measured time delays between multiple images provide a one-step determination of absolute cosmological distances, and therefore can constrain the Hubble constant (H_0) in a manner that is independent of the CMB or the local distance ladder. Since our previous milestone result, we have added another lens to our sample for a total of eight systems, and have obtained spatially resolved kinematics of one of the previous TDCOSMO lenses. We have extended our sample of external lenses with the addition of the SL2S sample and improved the quality of their kinematic measurements with Keck/KCWI IFU data in order to constrain the lens galaxy mass profile at the population level. We have incorporated an updated hierarchical analysis of line of sight structure, and are including triaxiality and projection effects to model stellar kinematics in the lens galaxies. The results are kept blinded until the analysis is complete. We expect a conservative $\sim 5\%$ measurement of H_0 from TDCOSMO lenses alone, and a $\sim 3\%$ measurement when the external lens datasets are incorporated.