

Galaxy lens models with offset mass components: implications for time delays and H_0 .

Monday, 25 January 2021 23:35 (25 minutes)

Accurate determination of the Hubble parameter from strong lensing depends critically on the mass model of the lensing galaxy. There is evidence that the commonly used elliptically symmetric lenses may not adequately represent the lens galaxy population. I will discuss the recent modeling of the quad Supernova iPTF16geu. Simple models suffer from a few deficiencies: the center and the position angle of the recovered mass are not the same as those of the observed light, and the density profile required by microlensing considerations is rather shallow. We model the lensing galaxy as a superposition of two mass components; allowing them to be offset from each other by up to 0.25 kpc alleviates most of the problems of simple models, and leads to predictions for microlensing magnification and time delays that differ from those of simple models. I will discuss the implications of two offset components lens modeling for H_0 estimation.

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