

Line-of-sight effects in strong lensing cosmology

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Inhomogeneities in the distribution of matter in the universe distort strong lens images, complicating cosmological constraints. However, they also leave a potentially measurable imprint on strong lens images. In the last decade, strong lensing has been proposed as a novel probe of cosmic shear, and thus the matter power spectrum. I will present the current status of this work: the interpretation of the line-of-sight shear, the reasons to believe this signal can be reliably measured with current and upcoming survey telescopes, the lens modelling challenges which remain as obstacles, and the anticipated power of this technique in obtaining cosmological constraints.

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