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# FRB-Weak Lensing Cross Correlations

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Weak lensing convergence maps offer a line-of-sight probe of the matter power spectrum, but cosmological inference from the total matter auto-power spectrum is contaminated by baryonic effects which limit the use of small scales. Fast radio bursts (FRBs) offer a line-of-sight probe of baryons at  $z \sim 1$  which offer a path towards independently measuring these baryonic effects at the field level. We propose to correlate weak lensing mass maps with dispersion measure maps produced by large samples of localized FRBs as a way to disentangle astrophysics from cosmology. We find that compared to the total matter power spectrum, the cross power is more sensitive to feedback by a factor of a few. With fiducial Euclid parameters, it should be detectable with a single year of observing FRBs with a next-generation instrument such as CHORD or the DSA- 2000; we can constrain feedback models with 5 years of operation. Finally, we propose a method of “nulling” the baryonic contribution to the matter auto-power spectrum. At  $l = 2000$ , the “nulled” power spectrum is several times less sensitive to feedback than the shear auto power spectrum alone.

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