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# Testing Cold Dark Matter with Strong Gravitational Lensing of AGN

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Strong gravitational lensing provides a means of measuring the halo mass function into regimes below which baryons are reliable tracers of structure. In this low mass regime ($M\_vir < 10^9$ M_sun), the microscopic characteristics of dark matter affect the predicted abundance of dark matter halos. Strong gravitational lensing has been limited by the small number of systems which can be used to detect dark matter substructure. I will discuss the narrow-line lensing technique, which enables a significant increase in the number of systems which can be used to measure the subhalo mass function, and the projected constraint on Cold vs. Warm Dark Matter with just the current sample of known strong gravitational lenses.

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