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**Assessing Mixed Sterile Neutrino Dark Matter Models<sup>1</sup>** ISABELLA IANORA, ANTON NAVAZO, CHAD KISHIMOTO, University of San Diego — Recent X-ray observations of galaxies and galaxy clusters suggest the existence of sterile neutrino dark matter with a mass of 7.1 keV. However, there is tension between calculated dark matter spectra and observations of small scale structure. In this talk, I will discuss a variety of mixed dark matter models, comprised of both cold dark matter and sterile neutrinos, whose inferred parameters are consistent with the X-ray observations. We assess the compatibility of these models in comparison to cosmological observables.

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