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Constraining atomic dark matter with the high-redshift UV luminosity function

Wednesday 15 May 2024 14:45 (15 minutes)

Atomic dark matter is a dark sector model including two fermionic states oppositely charged under a dark U(1) gauge symmetry, which can result in rich cosmological signatures. I discuss recent work using cosmological n-body simulations to investigate the impact of an atomic dark matter sector on observables such as the galactic UV luminosity function at redshifts >10, and consider the constraining power of recent JWST observations for this model.

Mini Symposia (Invited Talks Only)

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