

# Status of fermionic sub-GeV dark matter

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Models of Sub-GeV dark matter coupled to a dark photon with kinetic mixing feature a rich phenomenology. They are thus constrained by a number of laboratory, astrophysical and cosmological observations. The biggest obstacle for fermionic DM particles to make up all of the observed DM comes from the strong constraints placed by the CMB and X-ray emission on DM annihilation. This can be overcome by introducing a particle-antiparticle asymmetry. The viability of these models then depends on the delicate interplay between different constraints and the model features. I will present the results of global fits of (a)symmetric fermionic DM and conclude with projections of future experiments.

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