

Asymmetric dark matter and cold dark sectors

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There is a remarkable similarity between the dark matter mass density, of unknown origins, and the baryonic mass density which originates from a minuscule 1 in 10 billion asymmetry between matter and antimatter. Asymmetric dark matter models propose that a connected asymmetry generation mechanism is responsible for the abundance of both sectors.

In this talk I will review these motivations before exploring some constraints on ADM models and dark sectors and how these can often necessitate cold dark sectors.

Finally I will discuss a variety of ways that naturally cold dark sectors can arise.

Presenter: LONSDALE, Stephen (CTPU IBS)

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