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## Asymmetric Dark Matter via Leptogenesis

*samedi 19 mars 2011 08:30 (15 minutes)*

We discuss the generation of a dark matter asymmetry via new sphaleron processes associated to an extra non-abelian gauge symmetry common to both the visible and the dark sectors. Such a theory can naturally produce an abundance of asymmetric dark matter which is of the same size as the lepton and baryon asymmetries, as suggested by the similar sizes of the observed baryonic and dark matter energy content, and provide a definite prediction for the mass of the dark matter particle around 6 GeV, close to the region favored by DAMA and CoGeNT.

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**Classification de Session:** Neutrinos - Precision tests - Cosmology

**Classification de thématique:** Theory