

Axion-like particles and dark photons - hints from XENON1T and stellar cooling

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The recent excess of electron recoil events in XENON1T can be interpreted as the absorption of bosonic dark matter particles in the keV range such as axion-like particles or dark photons. The same particles could also be produced in astrophysical systems such as horizontal branch stars or white dwarfs and account for the anomalous cooling rates observed in these systems. In my talk I will investigate the possibility that these phenomena have a common origin and whether this interpretation is preferred over the background hypothesis from a statistical point of view.

I read the instructions

Secondary track (number)

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