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Supernova constraints on dark flavoured sectors

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I will present a recent application of the SN 1987A cooling bound to set a constraint on dark flavoured sectors. This is possible thanks to the fact that the protoneutron stars are hot and dense environments where hyperons can be efficiently produced. Therefore a decay of the form $\to n X^0$, where X^0 is a new bosonic dark particle, will be severely constrained. I will explain the ingredients required and the application to flavoured (massless) dark photons, axions and ALPs.

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