

Neutron portal: recent developments

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Mixing of neutrons (or more generically three-quark states) with dark fermions may generate interesting phenomenological consequences such as novel decay channels for neutrons, a possibility of neutron oscillation to dark states etc. I review certain laboratory constraints, as well as cosmological and astrophysical probes that significantly narrow down the available parameter space. I will review, in some detail, the pulsar heating phenomenon that provides tight constraint on neutron-mirror neutron oscillations.

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