ID contributo: **263** Tipo: **Parallel talk**

Optimal anti-ferromagnets for light dark matter detection

martedì 9 luglio 2024 15:40 (20 minuti)

We argue that anti-ferromagnets (in particular, nickel oxide) are optimal targets to look for sub-MeV dark matter with spin-dependent interactions. We show how they can potentially be sensitive to dark matter as like as the keV, with nickel oxide performing an order of magnitude better than all other compounds.
We also show how a powerful theoretical tool to approach this problem is that of effective field theories for spontaneously broken spacetime symmetries.

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Classifica Sessioni: Parallel 3

Classificazione della track: Parallel session: Light Dark Matter