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TRIDENT's prospects for thermal relics

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In this talk I will discuss the dark matter science case for the future TRIDENT neutrino telescope. We have recently performed a sensitivity study for galactic dark matter annihilations and found that TRIDENT will be able to reach the thermal relic target for dark matter for masses between 1-100 TeV. We contextualized this result in the wider search for dark matter by studying a specific dark matter model, exhibiting TRIDENT's unique potential. Furthermore, our analysis was the first of its kind to account for the stochastic nature of the Galactic plane neutrinos, the measurement of which will be an important astrophysical result in its own right. I will briefly discuss the ongoing work and future directions.

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