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Imaging the Galactic Core with a Neutrino Gravitational Lens of our Sun

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While the galactic core is 25,000 light years away but the number of stars there is immense making it the 2nd brightest neutrino source in the sky other than our Sun. The collection power of a gravitational Lens using our Sun is the most efficient way to focus this and unlike the light gravitational lens at 500 AU since the neutrino has mass its expected location is 20 to 40 AU, reachable with current and future planned NASA deep space probes. We are developing ways to make a neutrino gravitational lens to both image the galactic core in stellar neutrinos, and also this can be a new way to measure the mass of the neutrino.

Collaboration name

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