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SNIFR - Submarine Neutrino Identification For Reconnaissance

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We are now in an era where the sensitivity and scalability of neutrino detectors allows for more intimate investigation into nuclear reactors at range. The reactors deployed on nuclear submarines have a thermal power output around an order of magnitude lower than that of power reactors, but a scalable detector technology could be deployed on a large commercial ship to detect submarines at a range comparable to passive sonar in some scenarios, independent of environment. This talk presents the viability of this technique in the context of modern detector sensitivities, and discusses its practicality.

Abstract title

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