

Lowering IceCube's energy threshold for point source searches in the southern sky

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Veto techniques are opening up new doors for point source searches in IceCube. Traditional IceCube point source analyses are only sensitive to PeV-scale fluxes in the southern hemisphere. We demonstrate that extending the “high-energy starting event” veto to lower energies allows IceCube to probe southern sky sources in the 10 TeV – 1 PeV regime. After discussing the event selection and analysis method, we will show projected sensitivities and compare them to ANTARES point source analyses.

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