Abstract Submitted
for the APR20 Meeting of
The American Physical Society

A Transient Search with IceCube-DeepCore MICHAEL LARSON, University of Maryland, College Park, ICECUBE NEUTRINO OBSERVATORY COLLABORATION — A time-dependent flux of TeV neutrinos was recently discovered originating from the direction of the blazar TXS 0506+056 using the IceCube Neutrino Observatory. Additional events may be observable by IceCube at lower energies, although the existing analysis rapidly loses sensitivity below about 1 TeV. The densely instrumented DeepCore sub-array provides the ability to reduce the threshold for observation from 1 TeV down to approximately 10 GeV. This energy range, often ignored due to large backgrounds from conventional atmospheric neutrinos, can provide a unique window to probing low energy transient astrophysical fluxes. Using a newly developed sample, an analysis to search for astrophysical sources using these low energy transient sources will be presented.

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Date submitted: 10 Jan 2020 Electronic form version 1.4