Abstract Submitted
for the APR21 Meeting of
The American Physical Society

Every Flare, Everywhere: Untriggered Searches for Astrophysical Neutrino Transients with IceCube Data WILLIAM LUSZCZAK, JIM BRAUN, ALBRECHT KARLE, University of Wisconsin - Madison, THE ICECUBE COLLABORATION COLLABORATION — Recent results from IceCube regarding TXS 0506+056 suggest the presence of neutrino flares with no detectable gamma ray counterpart ("untriggered" neutrino flares). Here, we present the results of attempting to fit for all such flares across the entire neutrino sky in 10 years of IceCube data. These results represent the most detailed description of the neutrino sky to date, providing a neutrino "light-curve" at every possible location describing the start time, stop time, and spectrum of each neutrino flare candidate. Additionally discussed are the associated constraints on populations of transient astrophysical neutrino sources, as well as potential uses for these neutrino "light-curves" in the context of multi-messenger astronomy.

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Date submitted: 08 Jan 2021 Electronic form version 1.4