Search for Neutrinos from the blazar TXS 0506+056 using 10 years of IceCube data

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A high-energy neutrino event detected by IceCube on 22 September 2017 was coincident in direction and time with a gamma-ray flare from the blazar TXS 0506+056. Prompted by this encounter, 10 years of IceCube neutrino data were searched for additional, independent neutrino emission from the position of the blazar. Two methods were applied to search for an excess of neutrino events in the direction of TXS 0506+056: a time-dependent analysis searching for flux variations on time scales ranging from minutes to months, and a time-integrated search over the the entire analysis period. In this contribution, both analyses will be presented along with their results.

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