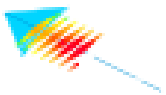

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ANTARES search for neutrino flares

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In 2017, a high-energy muon neutrino detected by IceCube was found positionally coincident with the direction of a known blazar, TXS 0506+056, in a state of enhanced γ-ray emission. Soon after, IceCube reported a compelling evidence for an earlier neutrino flare from the same direction found in the archival data, this time not accompanied by any observed electromagnetic activity. The IceCube findings suggest searching for flaring neutrino emissions from astrophysical sources, not necessarily accompanied by flares detected in γ-rays. The analysis presented in this contribution scans the events collected by the ANTARES neutrino telescope in 13 years of data taking in a search for clustering in space and time. The analysis method is based on an unbinned maximum likelihood approach. A generic Gaussian profile is assumed for the signal time emission, with both the Gaussian mean (time of the peak of the flare) and sigma (duration of the flare) being free parameters in the likelihood maximization. We plan to apply the time-dependent approach to the catalog of radio-bright blazars for which a promising directional correlation with IceCube muon tracks was recently reported [ApJ 894(2020)101, ApJ 908(2021)157].

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