Contribution ID: **917** Type: **Poster**

Posteriori analysis on IceCube double pulse tau neutrino candidates

Friday 16 July 2021 13:18 (12 minutes)

Astrophysical tau neutrinos can cause double pulse waveform signals in IceCube photon sensors. A previous 8-year analysis has found three tau neutrino candidates and the most promising one which is located very near to the dust layer in the detector. We will present a posteriori analysis on this event using a new ice model treatment with continuously varying parameters to do targeted volume re-simulation for tau neutrino and other background neutrino ensembles, which aims to explore the impact of different ice models on the expected signal and background statistics.

Keywords

Collaboration

IceCube

other Collaboration

Subcategory

Experimental Results

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Session Classification: Discussion

Track Classification: Scientific Field: NU | Neutrinos & Muons