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Neutrino (new secret) Astronomy

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The ICECUBE, ice cube km neutrino detector at South Pole, and its high energy starting events (HESE), either cascades (spherical shower) or longest muon tracks, well above several tens TeV or hundred TeV edges, had been claimed since 2013 to be the signature of a very possible Neutrino Astronomy. This new discovery was not based on any neutrino self correlations, nor to any event clustering to relevant X, gamma or radio bright source, neither to GRBs or AGN powerful flare connections. The 2013 new Astronomy had been based only on the sudden flavor change, from a muon track atmospheric (pion-Kaon decay) dominance (at TeVs energy), as a 0-1-0, electron-muon-tau neutrino ratio, to a cascade dominant HESE rate at hundreds TeV energy. These cascades had been suggested as being originated by a 1-1-1 “democratic” neutrino flavor component, made by cosmic astrophysical oscillations.

However the HESE tau neutrino signature, is, at present, nearly absent or negligible.

Moreover the same flavor change might be originated by a new atmospheric charmed component noise, leading to 1-1-0 flavor ratio, with almost absent tau flavor. Indeed the first ICECUBE HESE data 2013-2017, had shown such exact flavor component. Anyway, on September 2017 a possible AGN-ICECUBE track signal and connection had offered, to ICECUBE, more hopes of an astronomy discovery. Last ICECUBE flavor map changed suddenly and puzzling. Finally a very recent puzzling asymmetry are forcing us to stand for our different interpretation favoring the charmed atmospheric noise. In conclusion we suggest also a new (hidden and secret) Neutrino Astronomy screening, offering hope for a future filtered Neutrino Astronomy.

Summary

ICECUBE data might be ruled by charmed prompt atmospheric neutrinos, but a signal give hope for a new, secret, guarantee neutrino in near future.

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