Seventeenth Marcel Grossmann Meeting



Contribution ID: 398

Type: Invited talk in a parallel session

Probing the origin of cosmic neutrinos in the multi-messenger era: results from ANTARES

Tuesday, 9 July 2024 15:00 (25 minutes)

The high-energy neutrino observatory ANTARES concluded its 15-year observational campaign in February 2022. Among is primary goals was the identification of the sources of cosmic neutrinos.

Throughout its operational lifespan, ANTARES conducted multiple searches aimed at detecting steady and transient neutrino sources using different methods, such as inspecting for possible neutrino emission from the astrophysical objects described in multi-messenger catalogs. Moreover, starting in 2009, ANTARES has been involved in a rich real-time program which included searching for neutrinos in coincidence with promising transient astrophysical events, as well as triggering electromagnetic follow-up observations of interesting neutrino candidates by sending alert messages to the astronomical community.

An overview of the findings obtained through these research approaches over the full lifetime of ANTARES is provided in this presentation.

Primary author: ILLUMINATI, Giulia

Presenter: ILLUMINATI, Giulia

Session Classification: Neutrinos in the multi-messenger era

Track Classification: Neutrinos (NU): Neutrinos in the multi-messenger era