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15 Years of Transient and Multi-Messenger Astronomy with the ANTARES Neutrino Telescope

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The water Cherenkov neutrino telescope ANTARES was a 0.01 km³ volume detector located in the Mediterranean Sea which aimed at the detection of high-energy cosmic neutrinos, specially those of Galactic origin. It operated from 2007 until the beginning of 2022, accumulating more than 15 years of data. Its advantageous location allowed ANTARES to explore the Southern Sky, including the Galactic Centre with a high duty cycle while benefiting from an excellent angular resolution due to the Mediterranean water properties.

The coincident detection of the neutrino candidate IC170922A with flaring blazar TXS 0506+056 on 2017 constitutes one of the most important achievements of the multi-messenger astronomy and made clear the necessity of constant collaboration between different observatories and the benefits of constraining neutrino signal in time. ANTARES has actively participated in the search for transient neutrino signal playing an important role inside the multi-messenger community. In this talk we will briefly review all the transient analyses, results and contribution done by ANTARES during its 15 years of operation to the field of multi-messenger astronomy.

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