The transient high-energy sky seen with H.E.S.S.

Monday 13 September 2021 14:15 (30 minutes)

The last years have brought about unprecedented breakthroughs and discoveries in high-energy astro- physics. Most of them are related to transient phenomena and involve an increasing number of cosmic messengers ranging now from radiation across the full electromagnetic spectrum, to high-energy neutrino and gravitational waves. Due to their high sensitivity and increasingly optimized response to transient phenomena, high-energy gamma-ray observatories are playing a major role in this new field of time-domain and multimessenger astrophysics at the highest energies.

In this talk I will review some of the recent highlights involving transient multi-messenger phenomena with a focus on studies using the H.E.S.S. Imaging Atmospheric Cherenkov Telescopes in Namibia. I will present recent target-of-opportunity observations searching for high-energy gamma-ray emission from a variety of sources including gamma-ray bursts, gravitational waves, high-energy neutrinos and Fast Radio Bursts.

Abstract field

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Track Classification: Transients