

First follow-up of transient events with the CTA Large Size Telescope prototype

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The recent detection of a very high energy (VHE) emission from Gamma-Ray Bursts (GRBs) above 100 GeV performed by the MAGIC and H.E.S.S. collaborations, has represented a significant, long-awaited result for the VHE astrophysics community. Although these results' scientific impact has not yet been fully exploited, the possibility to detect VHE gamma-ray signals from GRBs has always been considered crucial for clarifying the poorly known physics of these objects. Furthermore, the discovery of high-energy neutrinos and gravitational waves associated with astrophysical sources have definitively opened the era of multi-messenger astrophysics, providing unique insights into the physics of extreme cosmic accelerators. In the near future, the Cherenkov Telescope Array (CTA) will play a major role in this observation type. Within this framework, the Large Size Telescopes (LSTs) will be the instruments best suited to significantly impact on short time-scale transients follow-up thanks to their fast slewing and large effective area. The observations of the early emission phase of a wide range of transient events with good sensitivity below 100 GeV will allow us to open new opportunities for time-domain astrophysics in an energy range not affected by selective absorption processes typical for other wavelengths. In this contribution, I will report about the observational program and first transients follow-up observations performed by the LST-1 telescope currently in its commissioning phase on La Palma, Canary Islands, the CTA northern hemisphere site

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