SciNeGHE 2016 High-energy gamma-ray experiments at the dawn of gravitational wave astronomy



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Prospects for Gamma-Ray Bursts detection by the Cherenkov Telescope Array

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The Large Area Telescope (LAT) on the Fermi satellite is expected to publish a catalogue with more than 100 Gamma-Ray Bursts (GRBs) detected above 100 MeV thanks to a new detection algorithm and a new event reconstruction. This work aims at revising the prospects for GRB alerts with the Cherenkov Telescope Array (CTA) based on the new LAT results. We start considering the simulation of the observations with the full CTA of two extremely bright events, the long GRB 130427A and the short GRB 090510, then we investigate how these GRBs would be observed by different subsamples of the array pointing to different directions, namely adopting the CTA "coupled divergent" mode.

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