Contribution ID: **13** Type: **not specified**

Prospects for detecting Gamma-Ray Bursts with the Cherenkov Telescope Array

The Large Area Telescope (LAT) on the Fermi gamma-ray satellite telescope observes Gamma-Ray Bursts (GRBs) at energies above 100 MeV. Thanks to a new detection algorithm and a new event reconstruction, it is expected to publish a catalogue with more than 100 GRBs. This work aims at revising the prospects for GRB alerts with the Cherenkov Telescope Array (CTA) based on the new LAT results. We start by 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, adopting the "coupled divergent" mode.

Primary author: Dr DI GIROLAMO, Tristano (Universita' di Napoli "Federico II")

Co-authors: VIGORITO, Carlo Francesco (TO); Dr BISSALDI, Elisabetta (INFN - Sezione di Bari); Dr DI PIERRO, Federico (INAF - Osservatorio Astrofisico di Torino); Dr LONGO, Francesco (Universita' degli Studi di Trieste); VALLANIA, Piero (TO); Mr GASPARETTO, Thomas (Universita' degli studi di Trieste)

Presenter: Dr DI GIROLAMO, Tristano (Universita' di Napoli "Federico II")