

## Unveiling the Enigmatic Nature of Peculiar Long GRBs in Swift's Third Catalog

Traditionally, LGRBs have been associated with the collapse of massive stars. However, our systematic search using a recalibrated Epeak-Eiso plane has revealed seven LGRBs that defy the canonical classification. Recent reports of apparent LGRBs are actually associated with mergers and exhibit extended emission, leading to classification confusion. Through meticulous temporal and spectral analysis, we provide insights into their elusive progenitors. Our investigation includes examining temporal estimators from Swift GRB observations. Future research will explore the properties of the host galaxies and surrounding media. By challenging established paradigms, our study contributes to the evolving GRB classification and improves our understanding of these powerful explosions.

**Author:** CARDENAS, Esteban (Escuela Politenica Nacional)

**Presenter:** CARDENAS, Esteban (Escuela Politenica Nacional)