

## The Fermi Light Curve Repository

*Friday 14 October 2022 11:45 (15 minutes)*

The Fermi Large Area Telescope Light Curve Repository (LCR) provides publication quality light curves on timescales of days, weeks, and months for over 1500 sources deemed variable in the 4FGL-DR2 catalog. The repository consists of light curves generated using a full likelihood analysis of the source and surrounding region, providing calibrated flux and photon index measurements for each time bin. The light curves hosted by the LCR cover the entire Fermi mission duration and are continually updated as soon as new data becomes available. The LCR is intended to serve as a resource to the time-domain and multi-messenger communities by allowing users to quickly search LAT data to identify correlated variability and flaring emission episodes from gamma-ray sources. We will provide an overview of the analysis employed by the LCR and the associated data access portal, and discuss the tools developed to allow users to easily download and use the LCR data.

### Track

Analysis Techniques

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**Session Classification:** Plenary 7