

## Fermi Large Area Telescope observations of high-energy gamma-ray emission from Solar Flares

*Wednesday, 26 April 2017 11:45 (30 minutes)*

The Fermi Large Area Telescope (LAT) observations of the active Sun provide the largest sample of detected solar flares with emission greater than 30 MeV to date. These include detections of impulsive and sustained emission, extending up to ~20 hours in the case of the 2012 March 7 X-class flares. These high-energy flares are coincident with GOES X-ray flares of X, M and C classes as well as very fast Coronal Mass Ejections (CME). We will present results from the First Fermi-LAT solar flare catalog covering the majority of Solar Cycle 24 including correlation studies with the associated Solar Energetic Particles (SEP) and CMEs.

**Primary authors:** Dr PESCE-ROLLINS, Melissa (INFN-Pisa); OMODEI, Nicola (Stanford University, CA, USA); PETROSIAN, Vahe' (Stanford University); ALLAFORT, Alice (Stanford University)

**Presenter:** Dr PESCE-ROLLINS, Melissa (INFN-Pisa)

**Session Classification:** Late Wednesday Morning