Contribution ID: **231** Type: **not specified**

# The Future of Gamma Ray Astrophysics

*Thursday 15 September 2016 12:00 (30 minutes)*

Over the past decade, gamma ray astrophysics has entered the astrophysical mainstream. Extremely successful space-borne (GeV) and ground-based (TeV) detectors, combined with a multitude of partner telescopes, have revealed a fascinating "astroscape" of active galactic nuclei, pulsars, gamma ray bursts, supernova remnants, binary stars, star-forming galaxies, novae much more, exhibiting major pathways along which large energy releases can flow. From a basic physics perspective, exquisitely sensitive measurements have constrained the nature of dark matter, the cosmological origin of magnetic field and the properties of black holes. These advances have motivated the development of new facilities, including HAWC, DAMPE, CTA and SVOM, which will further our understanding of the high energy universe. Topics that will receive special attention include merging neutron star binaries, clusters of galaxies, galactic cosmic rays and putative, TeV dark matter.

**Presenter:** BLANDFORD, Roger (Stanford University)

**Session Classification:** Plenary