



Contribution ID: 44

Type: **Contributed talk**

TeV blazars and their distance

Friday 12 November 2010 11:30 (20 minutes)

Recently, a new method to constrain the distance of blazars with unknown redshift using combined observations in the GeV and TeV regimes has been developed, with the underlying assumption that the Very High Energy (VHE) spectrum corrected for the absorption of TeV photons by the Extragalactic Background Light (EBL) via photon-photon interaction should still be softer than the gamma-ray spectrum observed by Fermi/LAT. The constraints found are related to the real redshifts by a simple linear relation, that has been used to infer the unknown distance of blazars. The sample will be revised with the up-to-date spectra in both TeV and GeV bands, the method tested with the more recent EBL models and finally applied to the unknown distance blazars detected at VHE.

Primary author: Ms PRANDINI, Elisa (Padova University & INFN)

Co-authors: Dr TAVECCHIO, Fabrizio (INAF – Osservatorio Astronomico di Brera, Merate, Italy); Mr BONNOLI, Giacomo (INAF – Osservatorio Astronomico di Brera, Merate, Italy); Prof. MARASCHI, Laura (INAF – Osservatorio Astronomico di Brera, Milano, Italy); Dr MARIOTTI, Mose' (Padova University & INFN)

Presenter: Ms PRANDINI, Elisa (Padova University & INFN)

Session Classification: Session 10

Track Classification: Cosmic infrared background