Contribution ID: **94** Type: **Poster (A0 portrait)**

TeV-candidate extreme blazars among Swift-BAT sources

Tuesday, 28 August 2018 15:45 (20 minutes)

Blazars spectral energy distributions are dominated by non-thermal emission from the jet, consisting of two main bumps. For the so-called extreme blazars, these components each peak in the X-ray and GeV-TeV bands. Recent TeV observations have revealed a few of these objects whose second peak exceeds several TeV (e.g. 1ES 0229+200). Such intriguing sources have been objects of different studies regarding the contribution of lepto-hadronic processes to their emission mechanism, the possible origin of extragalactic high-energy neutrinos, the implications of their TeV spectra on the extragalactic background light indirect estimates, and the intergalactic magnetic field measurements.
In order to increase the number of TeV EHBLs, we developed a criterium in order to select good EHBL candidates. Our sample is composed of six EHBL detected both in the hard X-ray band by the Swift-BAT telescope and in the high-energy band by the Fermi-LAT telescope, each of them not yet detected in the TeV band. We provide a multi-band study of their spectral energy distribution, discussing their potential detectability by the current and next generations of TeV gamma-ray telescopes.

Primary author: Dr FOFFANO, Luca (University of Padova)

Co-authors: Prof. FRANCESCHINI, Alberto (Padova University); Ms PRANDINI, Elisa (Padova University & INFN); Dr PAIANO, Simona (INAF and INFN Padova)

Presenter: Dr FOFFANO, Luca (University of Padova)

Session Classification: Poster Session and Coffee Break

Track Classification: Extragalactic