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Broad-band energy modelization of AGNs observed with CTA LST-1

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Jetted AGNs, also called blazars when the jet is oriented toward the observer, are the brightest persistent γ-ray sources in the extragalactic sky.
The next generation Cherenkov Telescope Array Observatory (CTAO) will include telescopes with three different size to cover the full range of energy (from 20 GeV up to 300 TeV) in order to reach unpreceded capabilities in the observation of the gamma-ray sky, opening a new window in the study of very-high-energy gamma-ray emission from AGNs. The prototype of the Large-Sized Telescopes (LSTs), called LST-1, covering an energy range from 20GeV to a few TeV, is already operating at La Palma, in the Canary Islands, and has detected some well known high-energy AGNs.
In order to fully interpret the highest γ-ray emission, the spectral modeling of multi-frequency data allows us to better understand the physics behind the formation of AGN jets and to identify deviations from the standard radiative model of blazars. To model the broad-band energy emission of blazars, powerful analysis tools are required.
In this talk, firstly I will present the spectral analysis of LST-1 observations of two AGNs, PG1553+113 and 1ES067+250. Then I will introduce an open virtual environment for modeling the multi-wavelength spectral energy distribution of blazars and, in particular, the results obtained for the two aforementioned sources.

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