

Synergies between CTA and VLBI

M. Orienti on behalf of the CTA Consortium

Gamma rays are produced by the most powerful and often explosive physical processes in the Universe. Understanding the origin and role of relativistic cosmic particles in galactic and extragalactic objects is among the key issue that will be addressed by the Cherenkov Telescope Array (CTA). With its huge improvement in sensitivity, angular resolution, energy range, and flexibility of operation, CTA will provide a step forward in our understanding of the gamma-ray emission in transients and active galactic nuclei (AGN).

At the other extreme of the spectrum, radio Very Long Baseline Interferometry (VLBI), with its milliarcsecond imaging and polarimetric capabilities have long been the key tool in studying the relativistic outflows that are the likely sites of gamma-ray production in AGN. Furthermore, VLBI ultra-precise astrometry will be fundamental for the study of transient phenomena.

In this contribution I will present an overview on the characteristics of CTA and on the science at high energy. Then, I will focus on the synergies between CTA and VLBI.