

Status of ASTRI Project

Friday, 8 July 2022 10:30 (20 minutes)

We will describe the current status of the ASTRI Mini-Array, under construction at the Teide Astronomical Observatory in Tenerife, Spain. The final layout of the array will include 9 small Cherenkov telescopes covering an area of about 650 x 270 square meters. The ASTRI telescopes adopt a dual-mirror Schwarzschild-Couder optical design. In the focal plane, the ASTRI camera, based on silicon photon-multipliers detectors, will cover a large field-of-view (~10 deg in diameter). This system provides a good gamma-ray sensitivity also at very high energies (VHE, above 100 TeV) and large off-axis angles (up to ~5 degrees), combined with a good angular resolution.

The scientific goals of the ASTRI Mini-Array include spectral and morphological characterization of the LHAASO sources and other Pevatron candidates, studies of PWNe and TeV halos, Blazar monitoring at VHE, fundamental physics and follow-up of transient events. The beginning of the scientific operations is planned in late 2024. The first 3 years will be dedicated to the core science and the ASTRI Mini-Array will be run as an experiment. During the following years it will gradually move towards an observatory model, open to the community.

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Session Classification: Invited Talks (Aula Magna Biologia) Chair: Stefano Vercellone