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## The roadmap to CTAO AGN Science: Early results on AGNs of LST-1

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After nearly two decades of operation, the current generation of Imaging Atmospheric Cherenkov Telescopes (IACTs) - consisting of MAGIC, VERITAS, and H.E.S.S. - has identified approximately 100 very-high-energy (VHE,  $E > 100\text{ GeV}$ ) gamma-ray sources beyond our Galaxy, most of which are Active Galactic Nuclei (AGNs), reaching up to a redshift of  $z=1$ . The forthcoming Cherenkov Telescope Array Observatory (CTAO), with its two locations in both the Northern and Southern Hemispheres, promises to revolutionise the field. CTAO will significantly expand the observable Universe at VHE, increasing the number of detectable sources, and enhancing the quality of data collected for population studies, highly detailed spectral and time-series analyses of specific targets.

In this talk, I will present the initial extragalactic science results from the Large-Sized Telescope prototype (LST-1) of the CTAO, a 23-meter diameter class telescope that has been observing regularly since November 2019 and is optimised to detect gamma rays with energies of 20-150 GeV. Additionally, I will provide a preview of the advancements expected with the completion of the remaining three LSTs at the CTAO-North site.

**Primary author:** MORCUENDE, Daniel (IAA-CSIC)

**Co-authors:** NIEVAS ROSILLO, Mireia (IAC); OTERO SANTOS, Jorge (IAA-CSIC); ARBET-ENGELS, Axel (MPP); SANCHEZ, David (LAPP)

**Presenter:** MORCUENDE, Daniel (IAA-CSIC)

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