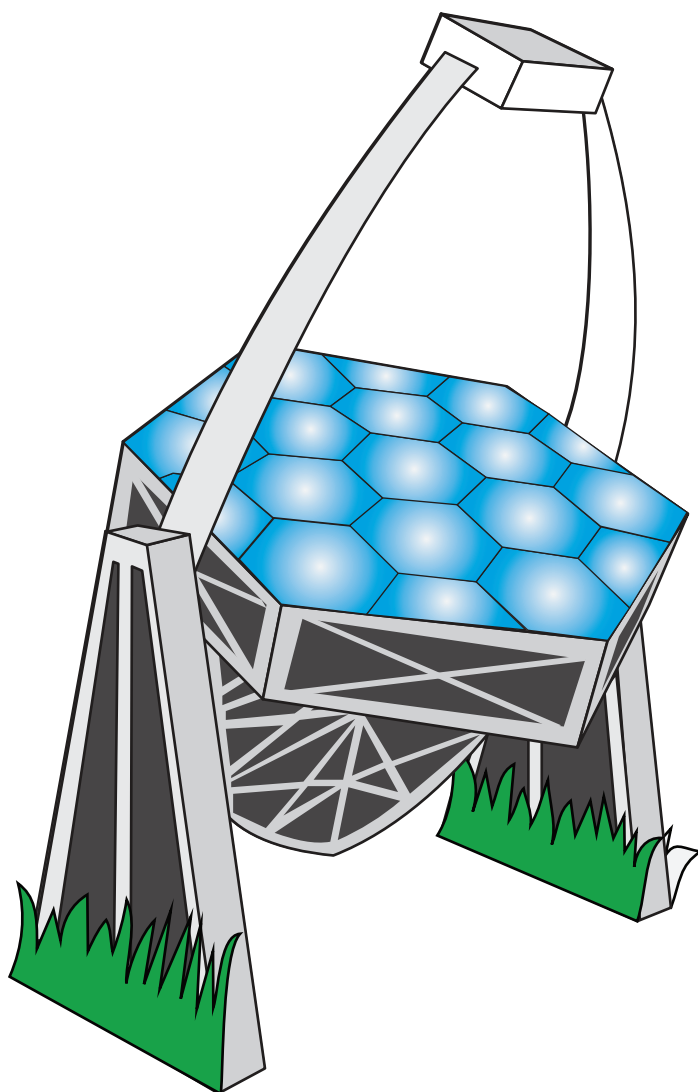


Paper Model of CTAO's Large-Sized Telescope (LST)

Original version created by Istituto Nazionale di Fisica Nucleare (INFN) and Liceo Mons. B. Mangino di Pagani (Italy)

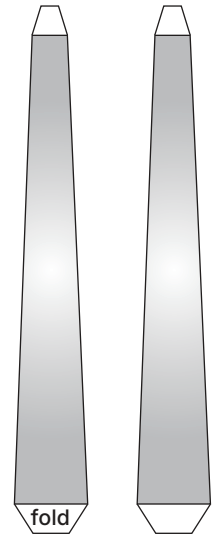


Scan the QR code
for instructions:



Camera Support Arch

Scan the QR code for instructions:



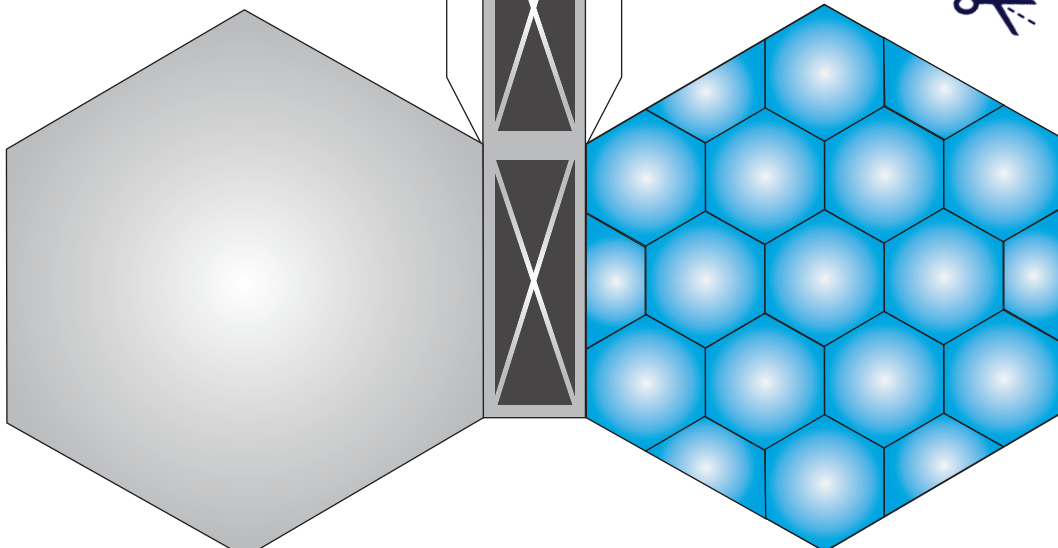
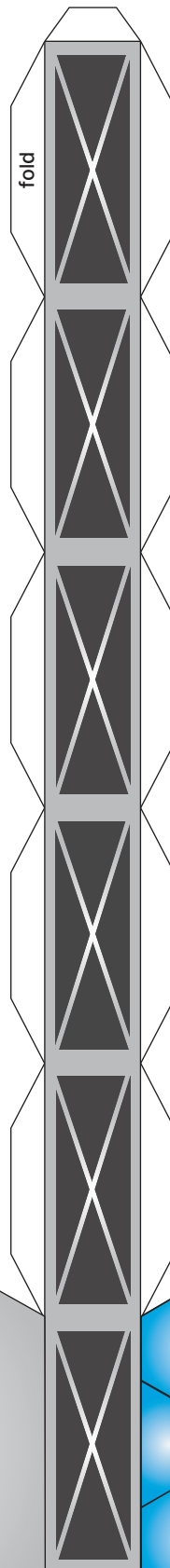
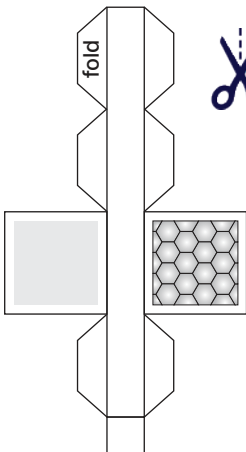
Did you know?

The CTAO (Cherenkov Telescope Array Observatory) will be the **world's largest and most powerful observatory** for gamma-ray astronomy. It will explore the high-energy Universe with dozens of telescopes at **two sites**: one in La Palma in the Canary Islands, **Spain**, and another in the Atacama Desert in **Chile**.

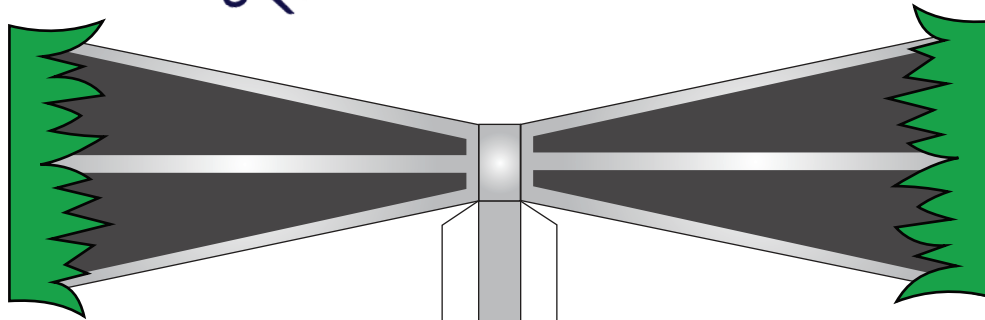
The CTAO will cover a huge energy range, from 20 GeV to 300 TeV (billions of times more energetic than visible light!) using three types of telescopes: **Large-Sized Telescopes (LSTs)**, **Medium-Sized Telescopes (MSTs)**, and **Small-Sized Telescopes (SSTs)**.

This paper model represents the LST.

Camera



Mirror Dish



Did you know?

You're building a **Large-Sized Telescope (LST)**! This is one of three types of telescopes that the CTAO will use to explore the high-energy Universe.

The LST has a **23-meter-diameter reflector with a massive 400 m² reflective surface**—almost the size of two tennis courts! When Cherenkov light is produced by gamma rays in the atmosphere the telescope's mirrors collect and focus the light onto its camera, where the light is digitised and analysed. This telescope is optimised to observe the CTAO's lower-energy range, from 20 to 150 GeV.

But don't be deceived by its enormous size! **Despite being 45 meters tall and weighing 100 tonnes, the LST is surprisingly nimble**, able to reposition anywhere in the sky within 20 seconds. This speed, combined with its sensitivity to low-energy signals, makes it essential for studying galactic transients, cosmic sources that can suddenly flare up or change activity.

Lateral Supports



Tubular Structure

