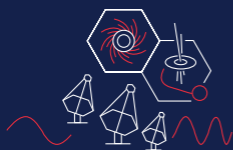


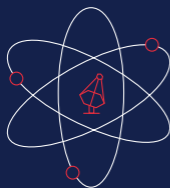
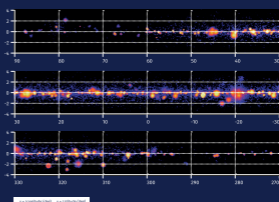
science



CTAO will seek to understand the impact of high-energy particles in the evolution of cosmic systems and to gain novel insight into the most extreme phenomena in the Universe.

Exploring the most extreme phenomena in the Universe

CTAO will build on the advances pioneered by its predecessors to expand the catalogue of known gamma-ray emitting cosmic sources five to tenfold, detecting more than **1,000 new objects**.



CTAO will seek to address questions falling under **three major themes**: Understanding the Origin and Role of Relativistic Particles, Probing Extreme Environments and Exploring Frontiers in Physics.

Credit: NAOJ

CTAO will conduct a **census of particle acceleration** in the Universe and will search for annihilating dark matter particles and deviations from Einstein's theory special relativity.



cherenkov
telescope
array

the observatory for
ground-based
gamma-ray astronomy