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## The Cherenkov Telescope Array Project: current status and science goals

The Cherenkov Telescope Array (CTA) will be the next generation gamma-ray observatory, open to the scientific community, to investigate the very-high-energy emission from a large variety of celestial sources in the 20 GeV - 300 TeV energy range. The full array, distributed over two sites, one in the northern and one in the southern hemisphere, will provide whole-sky coverage and will improve the sensitivity with respect to the current major arrays such as H.E.S.S., MAGIC and VERITAS by a factor of five to twenty, depending on the energy. CTA will investigate a much higher number of already known classes of sources, going to much larger distances in the Universe. Along with accurate variability and spatially-resolved studies, these improvements will also enable population studies. Moreover, new light will be shed on new classes of TeV sources, such as GRBs and clusters of galaxies. Furthermore, by pushing the high-energy limit to  $E > 100$  TeV, CTA will allow a thorough exploration of the cut-off regime of the cosmic accelerators. The search for an annihilation signature of dark matter in the Galactic halo and in prominent dwarf spheroidal galaxies is one of the most important goals of CTA. We review the current status of the CTA project, introducing the highlights from the telescope prototypes and discuss the main CTA Key Science Projects, which will focus on major scientific cases, allowing us to provide legacy data sets of high value to a wider community.

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