The Cherenkov Telescope Array Observatory: status and prospects

Thierry Stolarczyk*[1]

[1]Astrophysique Interprétation Modélisation – Commissariat à l'énergie atomique et aux énergies alternatives, Institut National des Sciences de l'Univers, Université Paris-Saclay, Centre National de la Recherche Scientifique, Université Paris Cité, Commissariat à l'énergie atomique et aux énergies alternatives : UMR$_{E9}$005, $CentreNationaldelaRechercheScientifique$: $UMR_7158, UniversitéParisCité : UMR_7158 - -France$

Abstract

The Cherenkov Telescope Array Observatory (CTAO) is the next-generation ground facility building on the experience gained by H.E.S.S., MAGIC, and VERITAS. As an observatory, all data, as well as a large fraction of observing time, will be available to the entire scientific community. Combining several types of telescopes on two sites in both hemispheres, Canary Islands in the North and the Atacama Desert in the South, it will be able to reveal the full sky as never before, covering the 30 GeV- 300 TeV range with unprecedented sensitivity and angular resolution. I will review the observatory's construction status and main scientific goals, with a particular focus on sky surveys and transient phenomena.

*Speaker