

Abstract Submitted
for the APR15 Meeting of
The American Physical Society

The Cherenkov Telescope Array PETER KARN, University of Wisconsin, Madison, THE CHERENKOV TELESCOPE ARRAY CONSORTIUM COLLABORATION — The Cherenkov Telescope Array (CTA) is the next-generation atmospheric Cherenkov gamma ray observatory. CTA is being developed by an international consortium which brings together the experience of all current-generation Cherenkov experiments. Arrays of dozens of telescopes in both hemispheres will provide an unprecedented view of the entire gamma-ray sky from 30 GeV to more than 100 TeV. Multiple telescope sizes optimized for different energy ranges and state of the art detector technology will give an order of magnitude increase in sensitivity compared to current experiments. CTA will allow for the most detailed studies to date of particle acceleration in a variety of galactic and extragalactic environments. In addition, new windows of parameter space will be opened for several physics frontier topics, including indirect dark matter detection and the positron excess.

Peter Karn
University of Wisconsin, Madison

Date submitted: 09 Jan 2015

Electronic form version 1.4