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## Extreme Astrophysics with the Cherenkov Telescope Array

Tuesday 9 April 2013 16:00 (30 minutes)

The Cherenkov Telescope Array (CTA, www.cta-observatory.org [www.cta-observatory.org]) is a global (27 nations, 1000 scientists, 150ME) project for gamma-ray astronomy planned for construction in 2014-2020. This high-profile project with ambitious and exciting science and technology is likely to capture the public imagination and the breadth and depth of the CTA science case has made it a key project in astronomy and particle astrophysics across the world. To reach the desired sensitivity CTA will consist of ~100 telescopes of several sizes. TeV gamma-rays are signatures of some of the most violent and intriguing phenomena in the universe, indicating sites of relativistic particle acceleration at PeV energies and possible signatures of dark matter. In this talk I will introduce CTA and the UK role. The UK is heavily involved in prototype camera work for a unique dual-mirror design for the Small Size Telescopes, and I will explain our concept and progress on this Compact High Energy Camera (CHEC).

**Presenter:** Dr RICHARD, White (University of Leicester) **Session Classification:** Plenary - APP Experimental