

Abstract Submitted
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Technology Development for AGIS (Advanced Gamma-ray Imaging System). FRANK KRENNRICH¹, Iowa State University — Next-generation arrays of atmospheric Cherenkov telescopes are at the conceptual planning stage and each could consist of on the order of 100 telescopes. The two currently-discussed projects AGIS in the US and CTA in Europe, have the potential to achieve an order of magnitude better sensitivity for Very High Energy (VHE) gamma-ray observations over state-to-the-art observatories. These projects require a substantial increase in scale from existing 4-telescope arrays such as VERITAS and HESS. The optimization of a large array requires exploring cost reduction and research and development for the individual elements while maximizing their performance as an array. In this context, the technology development program for AGIS will be discussed. This includes developing new optical designs, evaluating new types of photodetectors, developing fast trigger systems, integrating fast digitizers into highly-pixelated cameras, and reliability engineering of the individual components.

¹for the AGIS Collaboration

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