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COCOA: a compact Compton camera for astrophysical observation of MeV-scale gamma rays

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COCOA (COmpact COmpton cAmera) is a next-generation, cost-effective gamma-ray telescope designed for astrophysical observations in the MeV energy range. The detector comprises a scatterer volume employing the LiquidO detection technology and an array of scintillating crystals acting as absorber. Surrounding plastic scintillator panels serve as a veto system for charged particles. The detector's compact, scalable design enables flexible deployment on microsattellites or high-altitude balloons. Gamma rays at MeV energies have not been well explored historically (the so-called "MeV gap") and COCOA has the potential to improve the sensitivity in this energy band by up to two orders of magnitude.

Eligibility for "Best presentation for young researcher" or "Best poster for young researcher" prize

No

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