

Abstract Submitted
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Compton-Pair Production Space Telescope: Extending Fermi-LAT Discoveries into MeV Gamma-ray Astronomy¹ ANDREW SMITH, University of Maryland, College Park / NASA GSFC, COMPAIR TEAM — The keV-MeV gamma-ray energy range has remained largely unexplored over the last decade despite offering an exciting window into many astrophysical questions. This energy range is particularly challenging because it is firmly in the Compton-dominated regime where the interaction cross section is minimized. We are developing a MIDEX-scale wide-aperture discovery mission, Compton-Pair Production Space Telescope (ComPair), to investigate the energy range from 200 keV to \geq 500 MeV with good energy and angular resolution and with sensitivity approaching a factor of 20-50 better than previous instruments. . ComPair will build on the heritage of successful space missions including Fermi-LAT, AGILE, AMS and PAMELA, and will use well-developed space-qualified detector technologies including Si-strip and CdZnTe-strip detectors, heavy inorganic scintillators, and plastic scintillators.

¹on behalf of the ComPair Team

Andrew Smith
University of Maryland, College Park / NASA GSFC

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