

Abstract Submitted
for the APR18 Meeting of
The American Physical Society

**All-Sky Medium Energy Gamma-ray Observatory (AMEGO) -
A discovery mission for the MeV gamma-ray band** JEREMY PERKINS,
NASA/GSFC, AMEGO TEAM — The MeV domain is one of the most underex-
plored windows on the Universe. From astrophysical jets and extreme physics of
compact objects to a large population of unidentified objects, fundamental astro-
physics questions can be addressed by a mission that opens a window into the MeV
range. AMEGO is a wide-field gamma-ray telescope with sensitivity from 200 keV
to $\lesssim 10$ GeV. AMEGO provides three new capabilities in MeV astrophysics: sensi-
tive continuum spectral studies, polarization measurements, and nuclear line spec-
troscopy. AMEGO will consist of four hardware subsystems: a double-sided silicon
strip tracker with analog readout, a segmented CZT calorimeter, a segmented CsI
calorimeter and a plastic scintillator anticoincidence detector, and will operate pri-
marily in an all-sky survey mode. In this presentation we will describe the AMEGO
mission concept and scientific performance.

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Date submitted: 12 Jan 2018

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