Abstract Submitted for the APR18 Meeting of The American Physical Society

MeV Astrophysics in the Multimessenger Era ERIC BURNS, NASA/GSFC, AMEGO TEAM — AMEGO is a proposed probe-class mission that will observe the MeV band in unprecedented detail, and will be crucial in the multimessenger era. With the Laser Interferometer Gravitational-Wave Observatory'sdetection of gravitational waves in 2015 all four astrophysical messengers have now been directly observed. There have been two astrophysical events detected with two messengers: SN1987A in neutrinos and photons, and the merging of two neutron stars as GW170817, GRB 170817A, and the resulting kilonova. We will discuss the multimessenger science that is possible with ground-based gravitational wave detectors and MeV astronomy, as well as broader multimessenger prospects.

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Date submitted: 12 Jan 2018

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