Abstract Submitted for the APR16 Meeting of The American Physical Society

Future Prospects for Space-Based Gamma Ray Astronomy MARK MCCONNELL, Univ of New Hampshire — The gamma-ray sky offers a unique view into broad range of high energy astrophysical phenomena, from nearby solar flares, to galactic pulsars, to gamma-ray bursts at the furthest reaches of the Universe. In recent years, results from the Fermi mission have further demonstrated the broad range of topics that can be addressed by gamma-ray observations. The full range of gamma-ray energies is quite broad, from about 100 keV up to about 100 TeV. The energy range below several hundred GeV is the domain of space-based gamma-ray observatories, a range that is not completely covered by the Fermi LAT instrument. The gamma ray community has embarked on an effort to define the next steps for space-based gamma ray astronomy. These discussions are being facilitated through the Gamma-ray Science Interest Group (GammaSIG), which exists to provide community input to NASA in regards to current and future needs of the gamma-ray astrophysics community. Through a series of workshops and symposia, the GammaSIG is working to bring the community together with one common vision, a vision that will be expressed in the form of a community roadmap. This talk will summarize some of the latest results from active gamma ray observatories and will summarize the status of the community roadmap effort.

> Mark McConnell Univ of New Hampshire

Date submitted: 05 Jan 2016

Electronic form version 1.4