Abstract Submitted
for the APR15 Meeting of
The American Physical Society

ISS-Lobster: a low-cost wide-field X-ray transient detector on the ISS ROBERT PETRE, JORDAN CAMP, SCOTT BARTHELMY, NEIL GEHRELS, JUDITH RACUSIN, FRANK MARSHALL, ANDREW PTAK, NASA / GSFC — ISS-Lobster is a wide-field X-ray transient detector proposed to be deployed on the International Space Station. Through its unique imaging X-ray optics that allow a 30 deg by 30 deg FoV, a 1 arc min position resolution and a 10^{-11} erg/(sec cm^2) sensitivity in 2000 sec, ISS-Lobster will observe numerous events per year of X-ray transients related to compact objects, including: tidal disruptions of stars, supernova shock breakouts, neutron star bursts and superbursts, high redshift Gamma-Ray Bursts, and perhaps most exciting, X-ray counterparts of gravitational wave detections involving stellar mass and possibly supermassive black holes. The mission includes a 3-axis gimbal system that allows fast Target of Opportunity pointing, and a small gamma-ray burst monitor to be contributed by the Technion (Israel Institute of Technology.)

Robert Petre
NASA / GSFC

Date submitted: 08 Jan 2015 Electronic form version 1.4