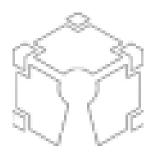
Open Source CubeSat Workshop 2018



Contribution ID: 25 Type: Poster

VIGIL Radar Sentry

VIGIL is a small radar in lunar orbit to track debris from deep space launches. There have been dozens of rocket stages in lunar-crossing high Earth orbit. There is a possibility that some have been captured in lunar orbit by 3-body effects. With increased travel to the Moon, unexpected objects in lunar orbit pose a risk. Since these objects are not large, and specular flashes may be intermittent, a radar must both maximize power on the target and integrate for a long time. Linear frequency-modulated (LFM) continuous wave (LFMCW) is a method that would address these needs and also avoid range ambiguities.

Primary author: THOMPSON, Michelle (Open Research Institute)

Presenter: THOMPSON, Michelle (Open Research Institute)

Session Classification: Posters and Demos

Track Classification: Science Instruments and Payloads