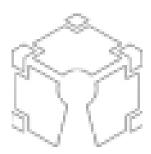
Open Source CubeSat Workshop 2019



Contribution ID: 42 Type: Round Table

Mega Constellations and Collision Propagation: Open Source Solutions to Mapping Debris and Measure Threats

Monday, 14 October 2019 14:00 (30 minutes)

Despite efforts, large quantities of space debris end up in various orbits threatening, not only current and future missions, but also space exploration as a whole. The addition of mega constellations will most likely only worsen the probability of collisions and visual exploration. Added to this, there is the fast-growing telecommunications industry, and with cube-sats becoming more in demand, certain orbits will become unusable in the coming decades. The need to discuss possible solutions is overdue. There lie two main issues: the financial burden of removal and how to initiate an international space policy. With opensource, we have the ability to get free aid from the opensource community – and that is the first step to a solution. With data, we can begin to evaluate the consequences and convince legislature. Is the solution, perhaps a cube-sat in LEO that maps debris or shoots down debris with an on board laser?

This roundtable discussion would be to brainstorm about possible ways opensource can contribute to solving the issue of first mapping the debris, and second evaluating the threat/collision propagation thereof.

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