

# A System for Collaborative Design, Analysis, and Optimization of Spacecraft Trajectories

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*SpaceOps 2018*

*May 28, 2018  
Marseille, France*



We ❤️ Engineering

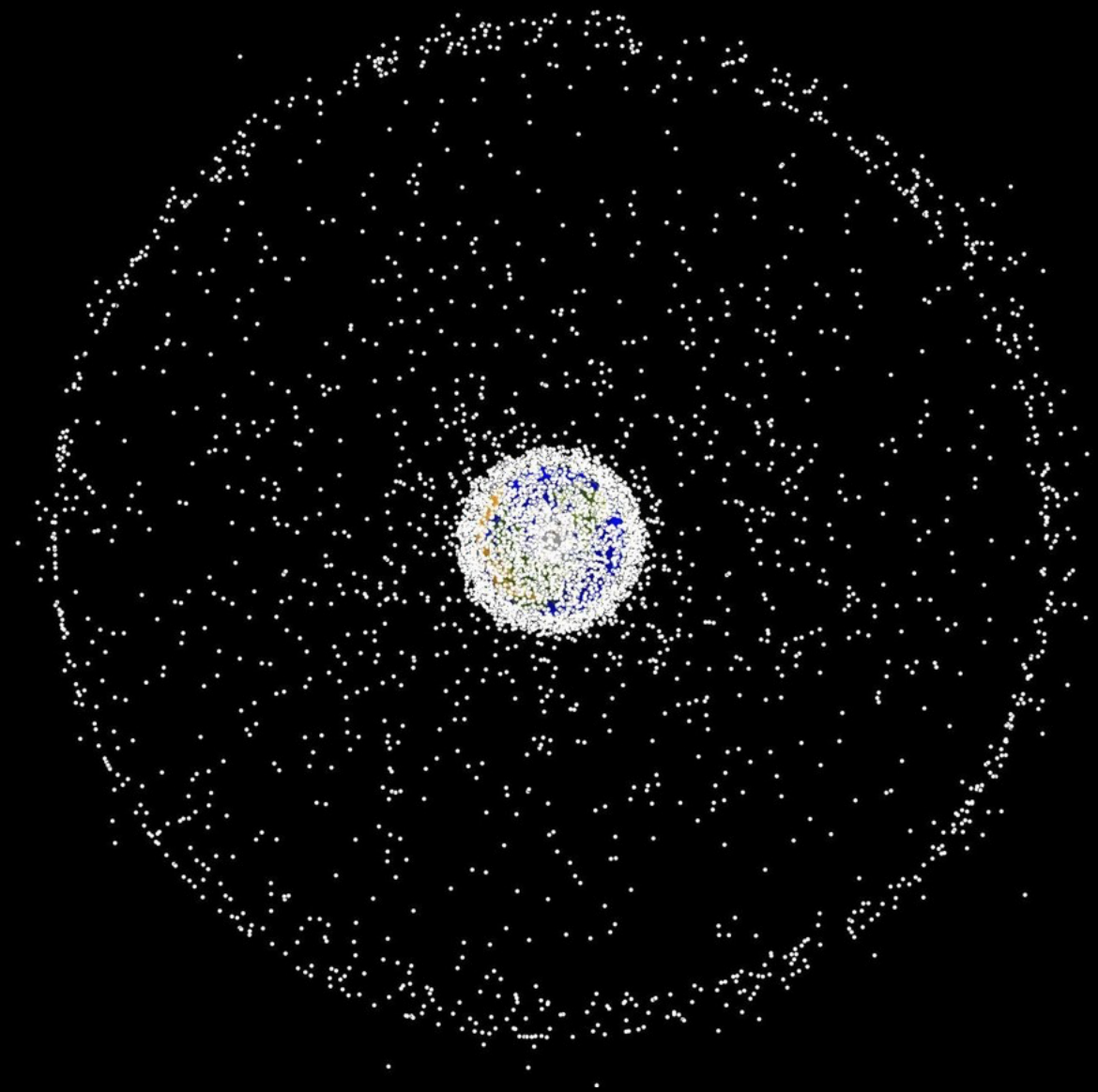
**Rocket Science is Hard**

**And We Keep Reinventing It**

$$M = E - e \sin E$$

**High Performance Computing is  
Hard**

**And We Keep Reinventing It**



**Cybersecurity is Hard**



**And We Keep Reinventing It**



All Your Spaceships Are Belong To Us

**Collaboration is Hard**

**And We Keep Ignoring It**

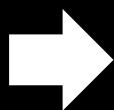
**P** ➔

**CPU Time**

➔ **S**



**P**



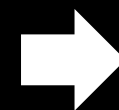
**Gather  
Requirements**

**Set Up  
Computing  
Infrastructure**

**CPU**

**Collect  
and Analyze  
Results**

**Communicate  
Findings**



**S**

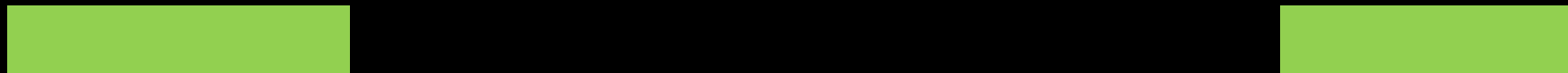
**Team 1**



**Team 2**



**Team 3**



**Team 4**



**Engage in Mission Design and Operations**  
**Like Software Developers Engage with Code**

**Transfer  
Graph  
Datastructure**

**Search  
Strategy  
Interface**

**Optimization  
Strategy  
Interface**

**Distributed  
Analytics  
Engine**

**Elastic, Secure API**

**CubeSat  
Operator**

**Research  
Institutions**

**Government  
Agency**

**Traditional  
Operator**



**Collaborative**  
**High Performance**  
**Cybersecure**  
**Astrodynamics**

# Astrodynamics Cloud

Currently Begging NASA for Money at  
<https://www.astrodynamics.cloud>



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