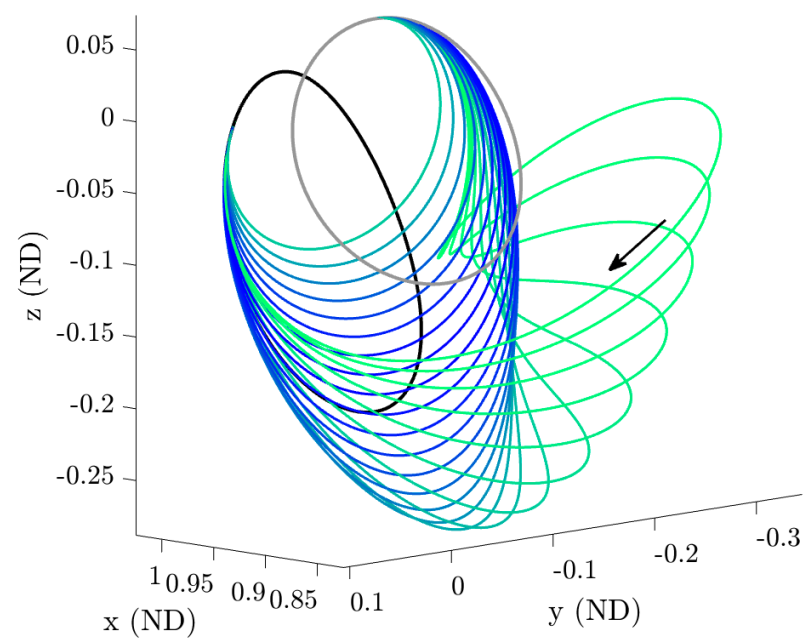


Family of Low-Thrust Transfers Between Two Southern L1 Halo Orbits



Project by Josiah Badiali,  
Antony Fleming, and Jonathan Richmond

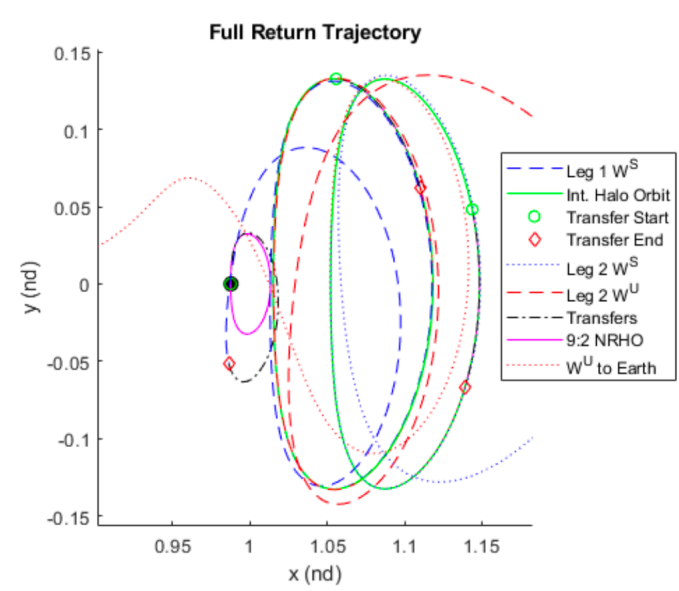
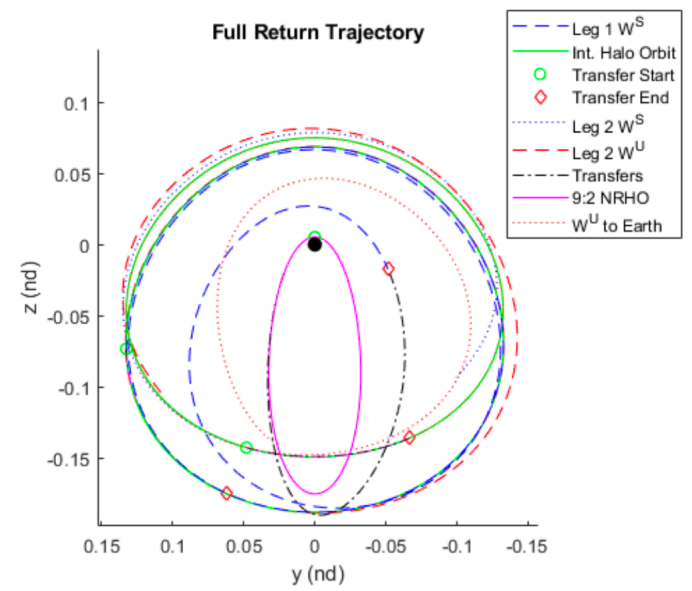


Figure 19. Full return trajectory in the Lunar vicinity (synodic frame).

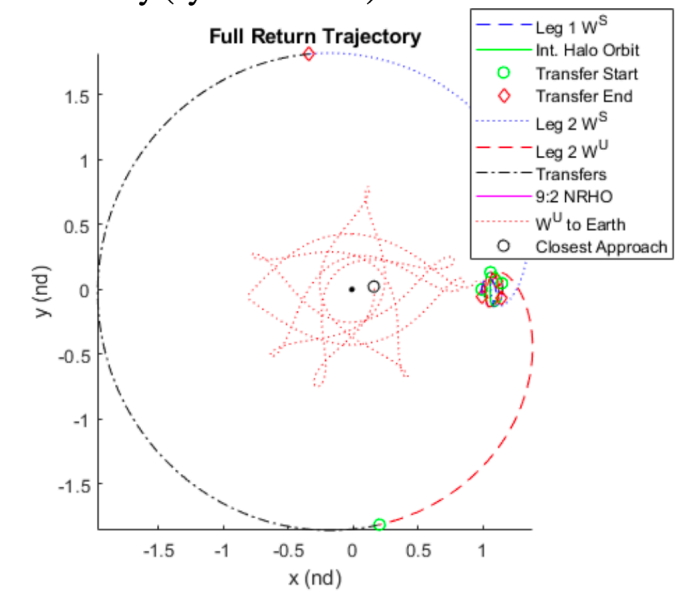
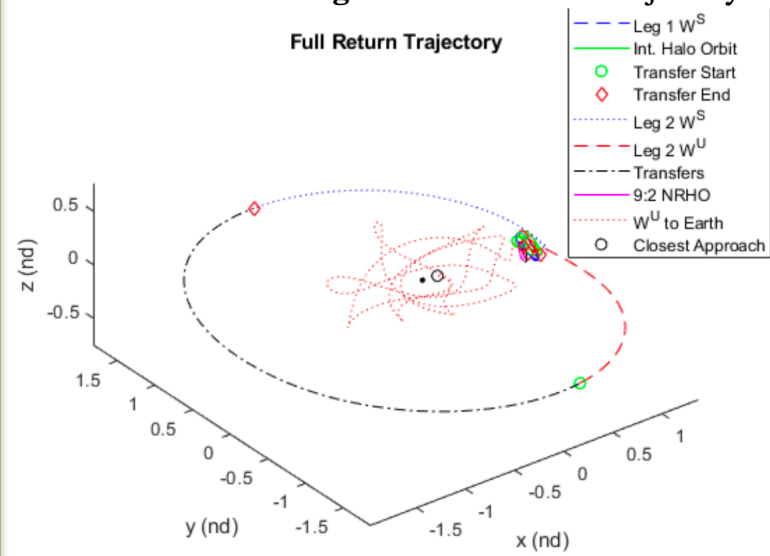
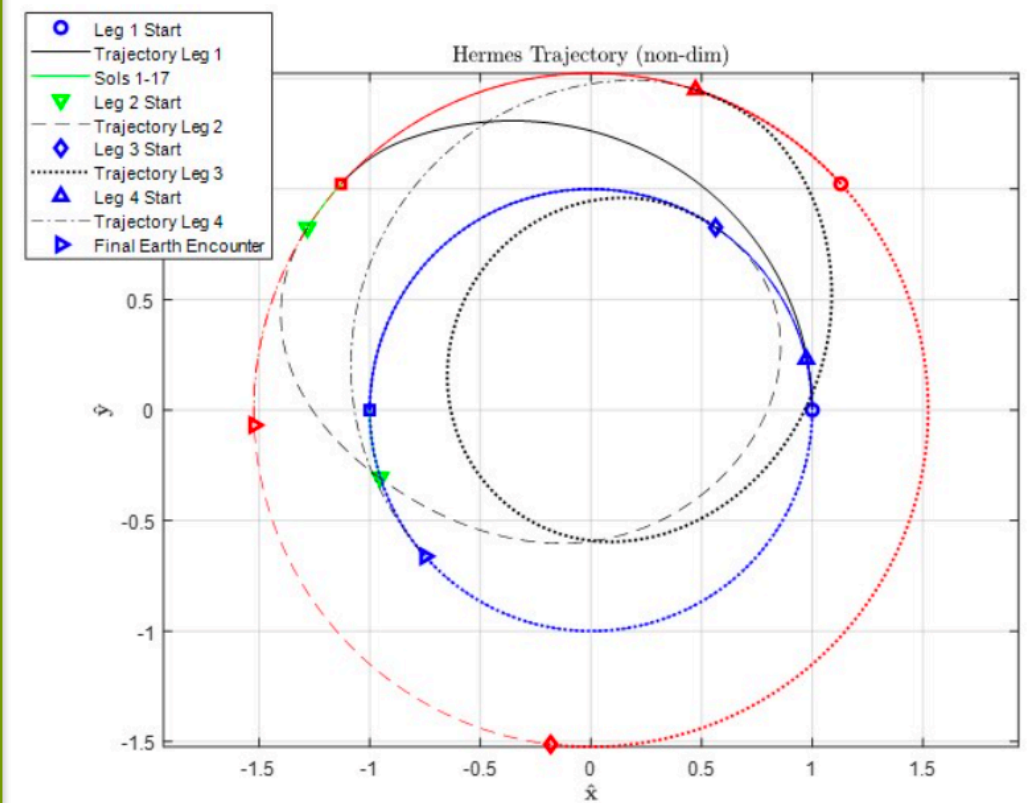
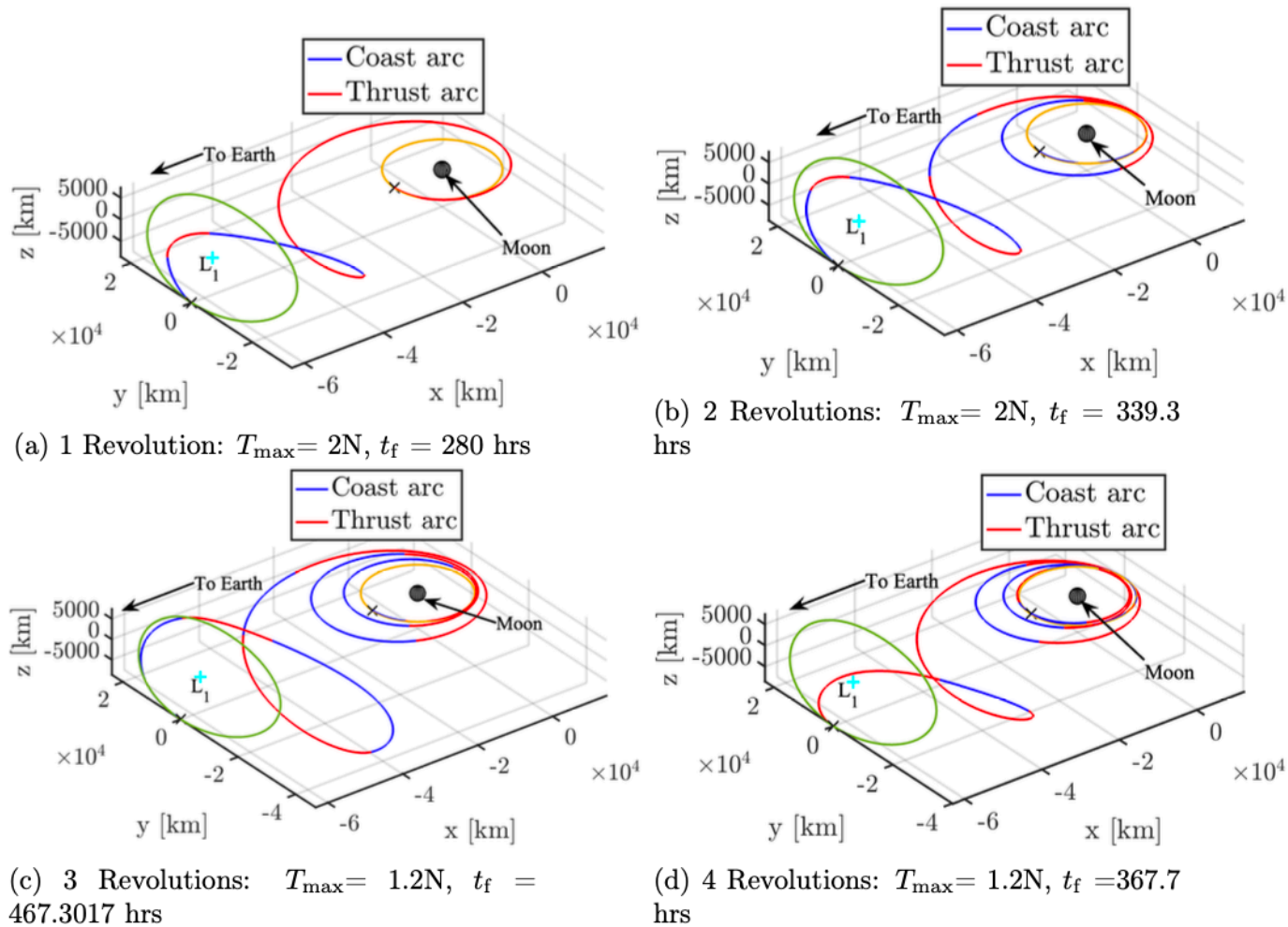


Figure 20. Full return trajectory at its entire scale within the Earth-Moon system (synodic frame).



**Figure 14: Final Trajectory**

Figure 7: 4 Families of low-thrust fuel-optimal Halo-to-DRO transfers.

Project by Yanis Sidhoum,  
Takanori Mizuhara, and Hami Candassato

Project by Henry Lewis

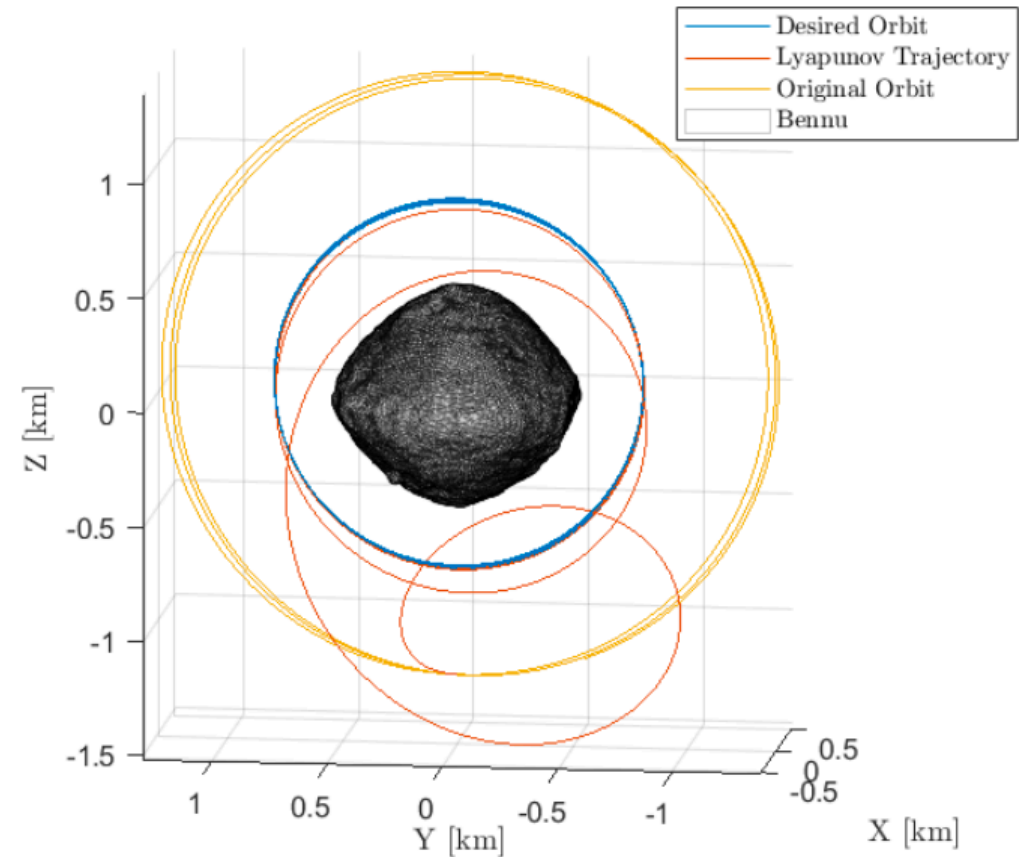
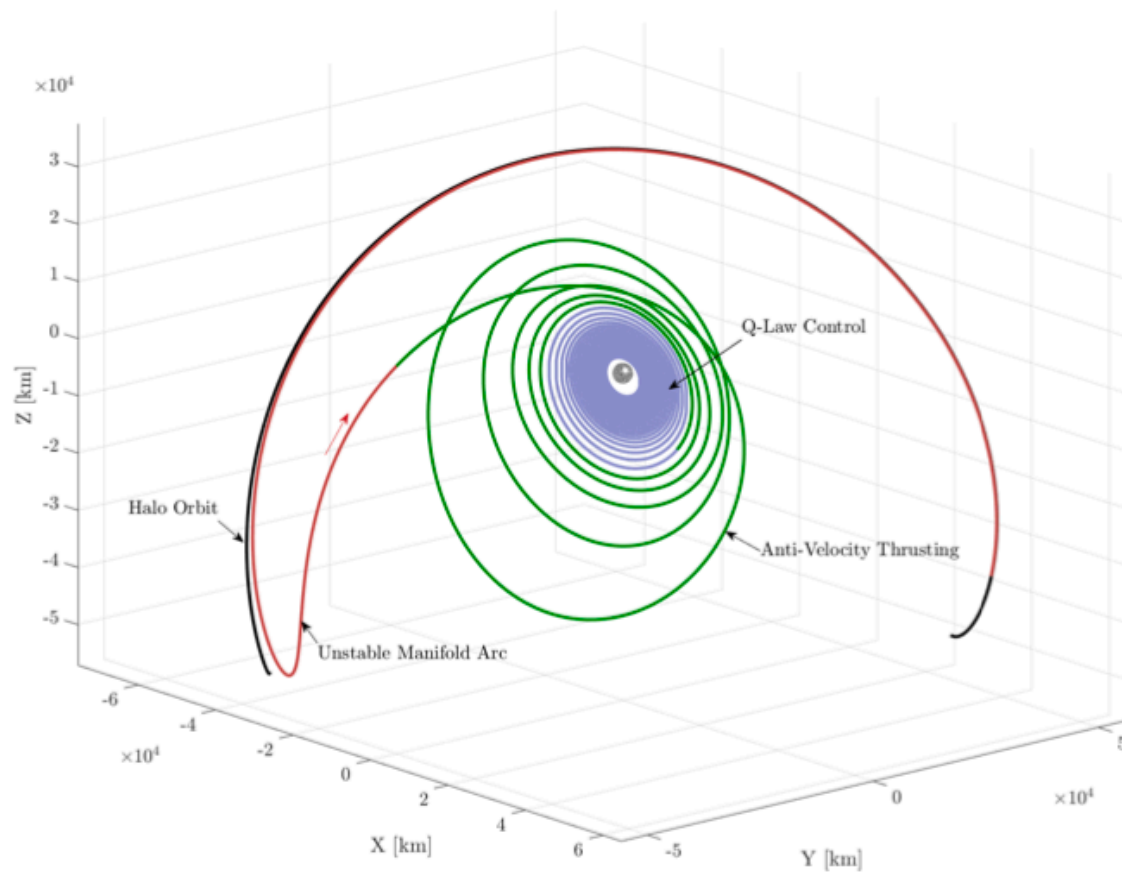
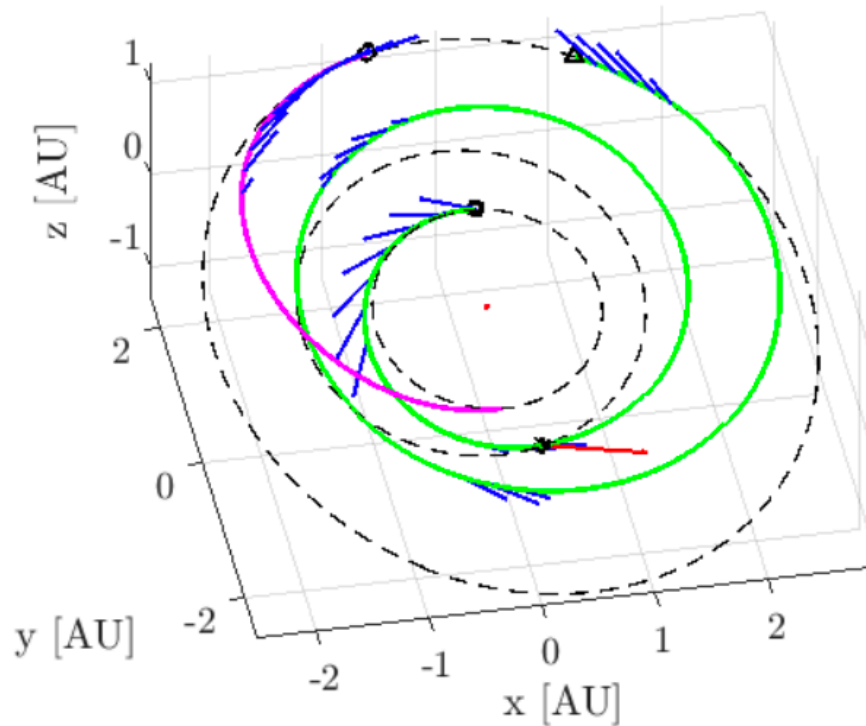


Fig. 11: Lyapunov Orbit Control in ANH3BP

**Figure 12. End-to-end transfer from the halo orbit to the specified low lunar orbit in the Moon-centered inertial frame.**

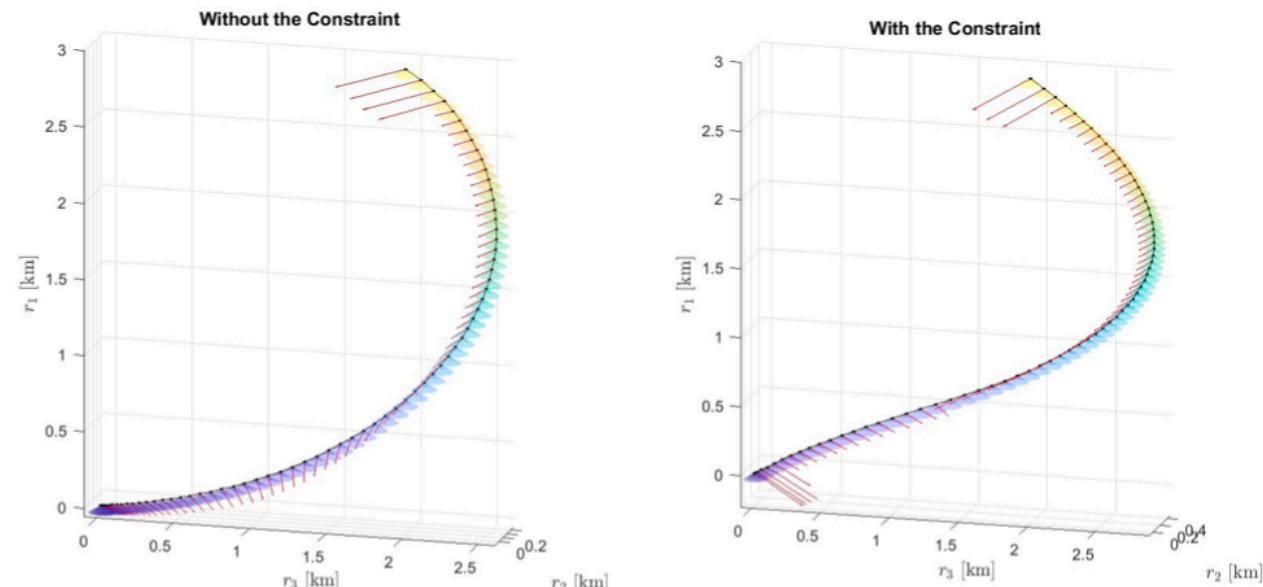
Project by Maaninee Gupta, Rolfe Power, and Ricardo Gomez

Project by Aaron Liao,  
Stav Zeliger, and Jay Singh



**Figure 5:** Earth-Mars-Ceres-Earth trajectory. The green line shows the outbound trajectory, and the magenta line shows the inbound trajectory. Other plotted arrows/lines represent the same data as the Earth-Mars-Ceres example.

Project by Naoya Kumagai



**Figure 9:** Thrust Direction Constraint Visualization

Project by Yanis Sidhoum,  
Takanori Mizuhara, and Hami Candassato