

HELGE EICHHORN – EUROSCIPY 2015

A full-page background image showing a rocket launch at sunset. A thick plume of white smoke and fire rises from the horizon, curving upwards and to the right. A bright, jagged white streak, resembling a lightning bolt or a rocket's afterburner, extends from the top of the plume towards the upper right corner of the frame. The sky is a deep blue with scattered clouds, and the horizon is lit with orange and yellow light from the setting or rising sun.

SPACE MISSION DESIGN WITH PYTHON



TECHNISCHE
UNIVERSITÄT
DARMSTADT



esoc

european space
operations center



<https://github.com/helgee>

WHAT IS SPACE
MISSION DESIGN?

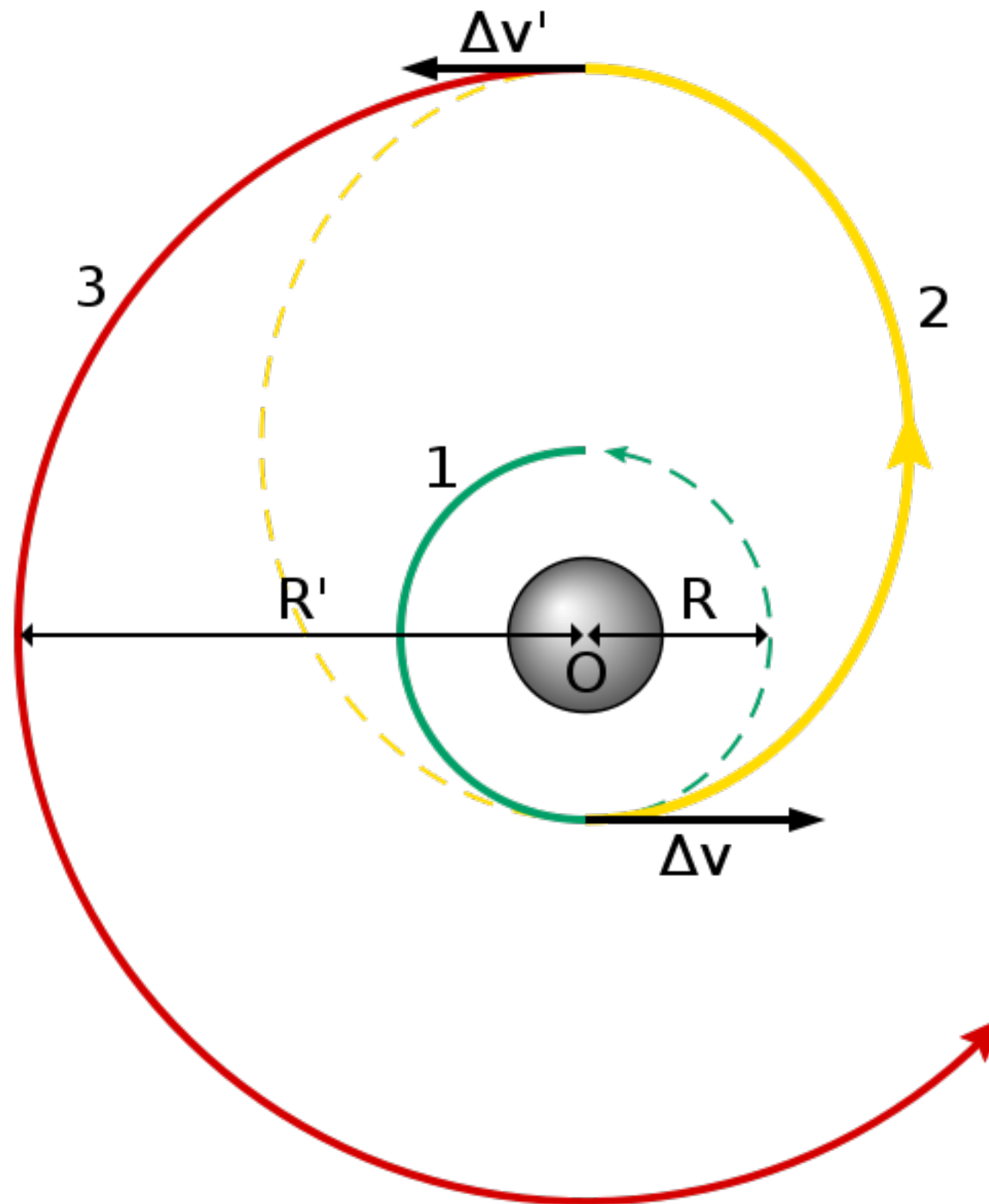
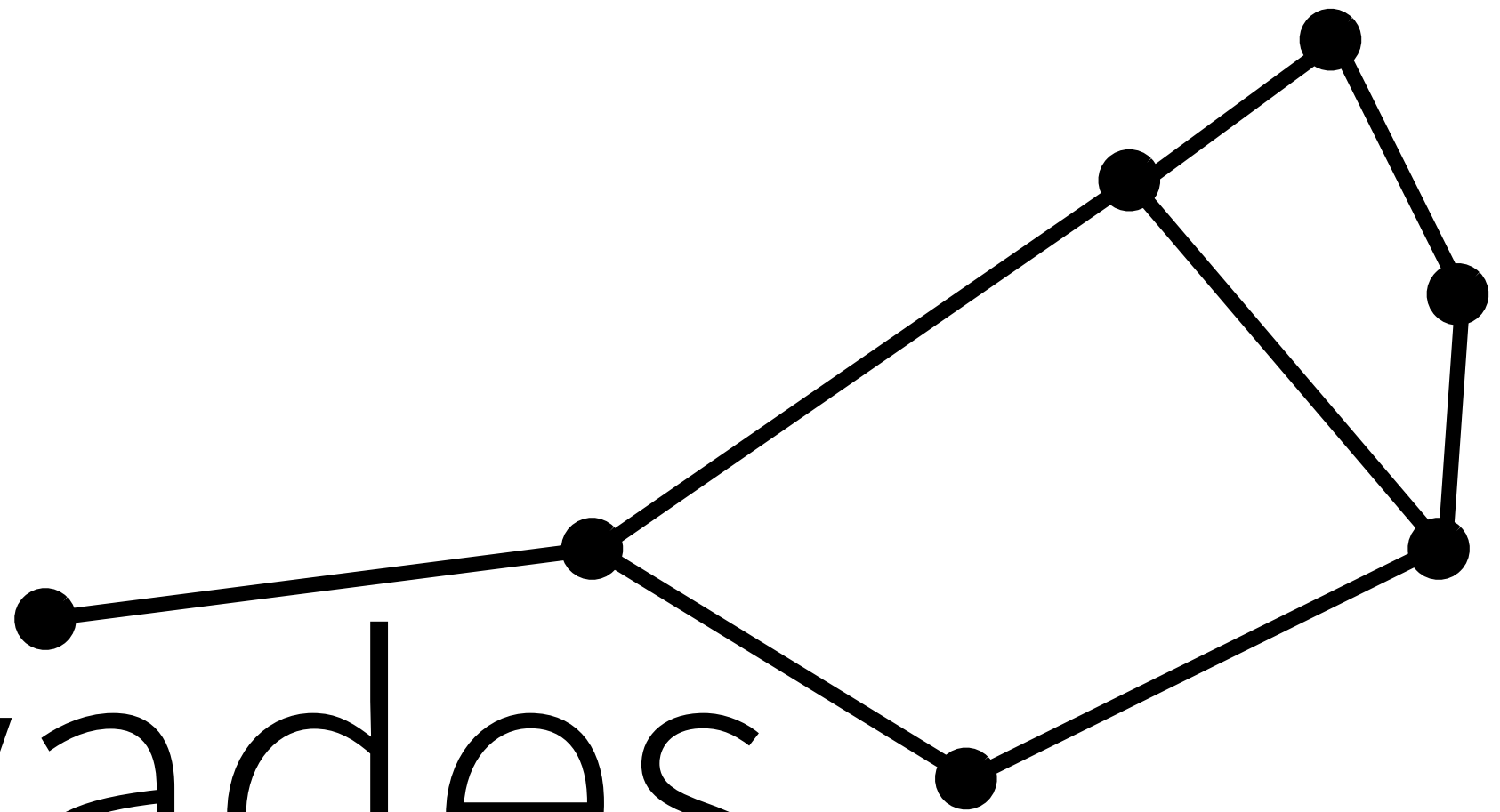


IMAGE SOURCE: [HTTP://EN.WIKIPEDIA.ORG/WIKIFILE:HOHMANN_TRANSFER_ORBIT.SVG](http://en.wikipedia.org/wiki/File:Hohmann_transfer_orbit.svg)

WHY PYTHON?

Plyades



<https://github.com/helgee/plyades>

WHY NOT PYTHON?



The logo for the Julia programming language, featuring the word "julia" in a dark gray, lowercase, sans-serif font. Above the letter 'j' is a blue circle. Above the letter 'i' is a red circle. Above the letter 'l' is a green circle. Above the letter 'a' is a purple circle.

julia



Astrodynamics.jl

<https://github.com/helgee/Astrodynamics.jl>

JPLEphemeris.jl

<https://github.com/helgee/JPLEphemeris.jl>

OTHER PYTHON-BASED ASTRODYNAMICS PROJECTS



<https://poliastro.github.io/>



<http://esa.github.io/pykep/>