In [15]:

```
import astropy
import numpy
import matplotlib
import numba
import plotly
import sciPy
```

In [13]:

```
pip install jplephem
```

```
Requirement already satisfied: jplephem in ./opt/anaconda3/lib/python 3.9/site-packages (2.17)
Requirement already satisfied: numpy in ./opt/anaconda3/lib/python3.9/site-packages (from jplephem) (1.20.3)
Note: you may need to restart the kernel to use updated packages.
```

In [7]:

```
conda install -c conda-forge poliastro
```

```
Collecting package metadata (current_repodata.json): done Solving environment: done
```

All requested packages already installed.

Note: you may need to restart the kernel to use updated packages.

In [8]:

```
from astropy.time import Time

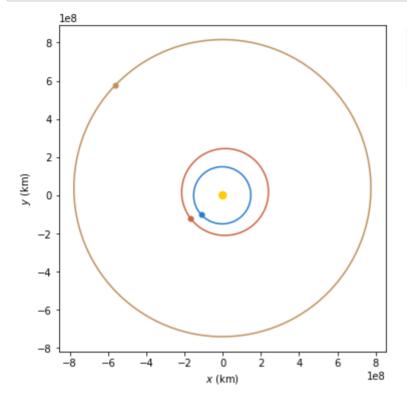
from matplotlib import pyplot as plt

from poliastro.bodies import Earth, Mars, Jupiter, Sun
from poliastro.frames import Planes
from poliastro.plotting import StaticOrbitPlotter
from poliastro.twobody import Orbit
```

In [9]:

```
epoch = Time("2018-08-17 12:05:50", scale="tdb")

plotter = StaticOrbitPlotter(plane=Planes.EARTH_ECLIPTIC)
plotter.plot_body_orbit(Earth, epoch, label="Earth")
plotter.plot_body_orbit(Mars, epoch, label="Mars")
plotter.plot_body_orbit(Jupiter, epoch, label="Jupiter");
```



Names and epochs
2018-08-17 12:05 (Earth)
2018-08-17 12:05 (Mars)
2018-08-17 12:05 (Jupiter)

In [10]:

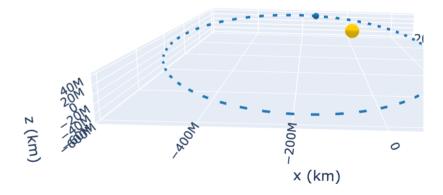
```
import numpy as np

from poliastro.bodies import Earth, Sun
from poliastro.constants import J2000
from poliastro.examples import churi, iss, molniya
from poliastro.plotting import OrbitPlotter3D
from poliastro.twobody import Orbit
import plotly.io as pio
pio.renderers.default = "plotly_mimetype+notebook_connected"
```

In [11]:

```
churi.plot(interactive=True, use_3d=True)
```

OMP: Info #271: omp_set_nested routine deprecated, please use omp_set_max_active_levels instead.



In []: