

A long-exposure photograph of a night sky showing numerous concentric star trails. The trails are centered on a point in the sky, likely the celestial pole. Below the sky, a dark mountain range is visible, partially obscured by a layer of white clouds. In the foreground, a winding road curves through a dark, rocky landscape. The overall scene is a combination of astronomical and landscape photography.

How the Earth moves

Carolyn Crawford
Gresham Professor of
Astronomy

P. Michaud, Gemini Observatory



The Time Machine 1960

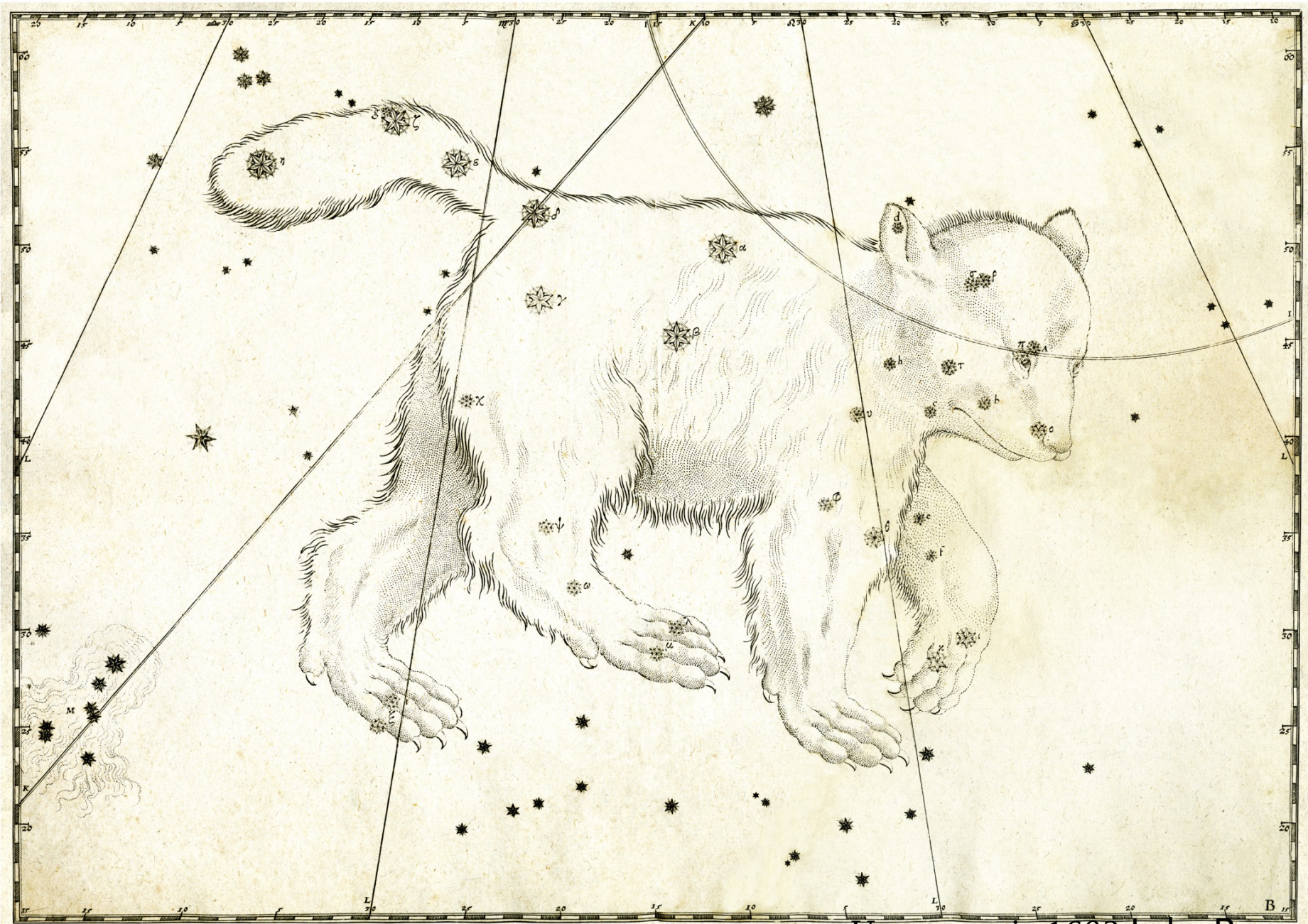


Pete Strasser





Jimmy Westlake



Uranometria 1603 John Bayer



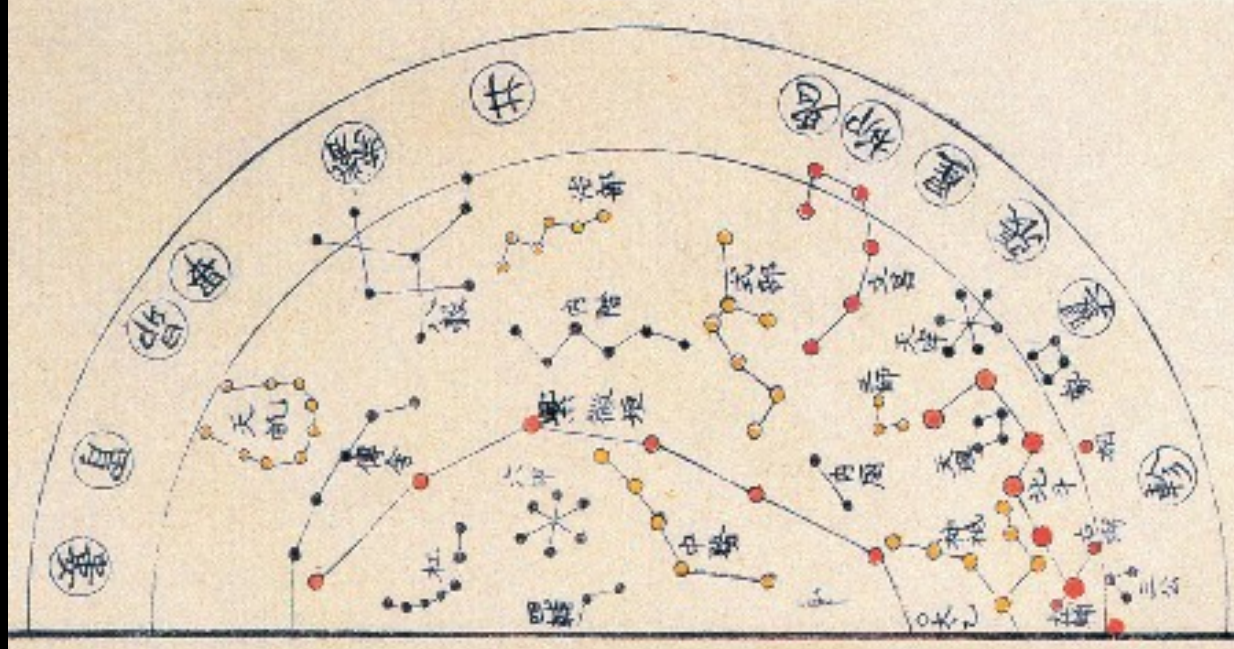
Uranometria 1603 John Bayer



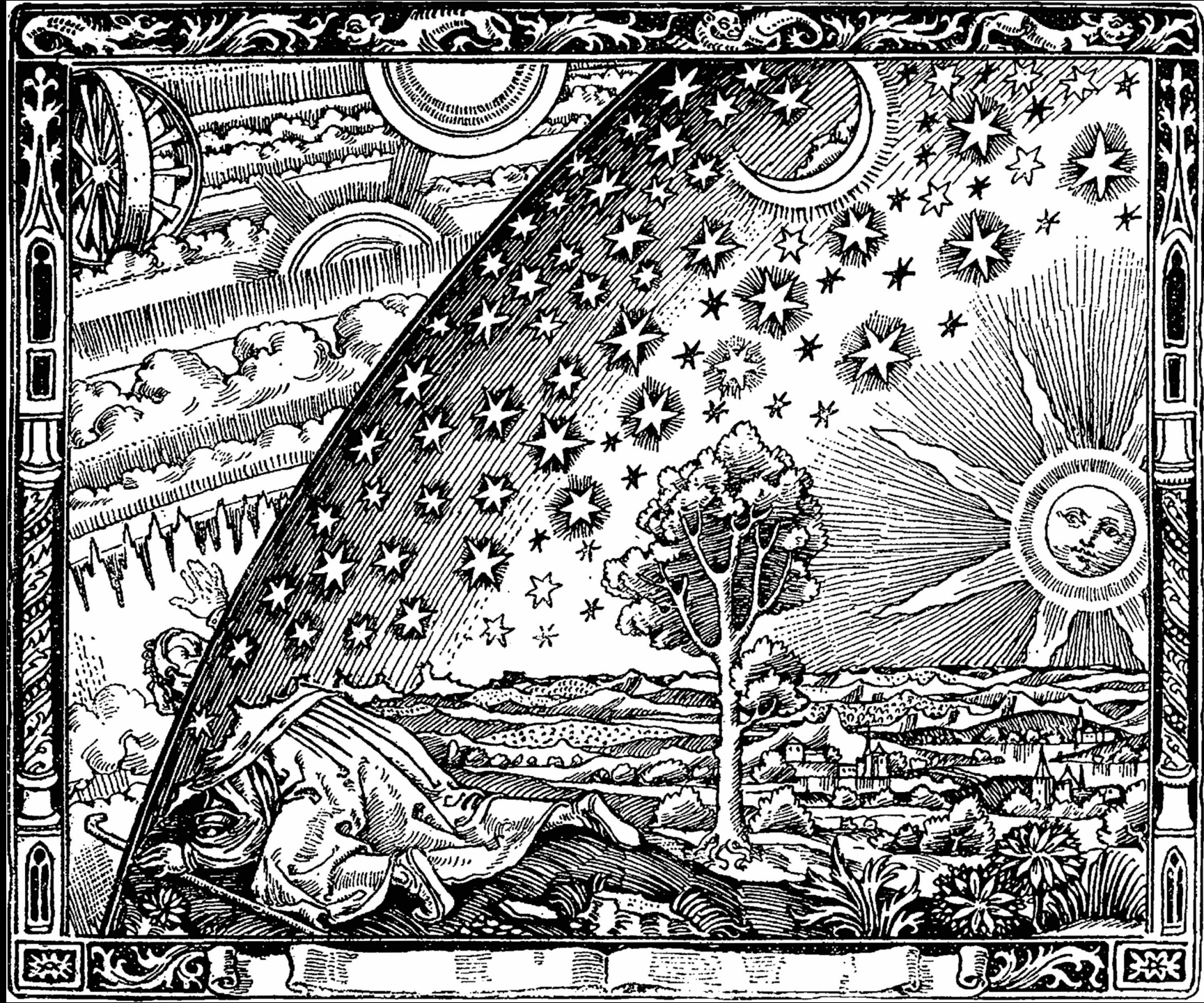
Farnese Atlas, National Archaeological Museum, Naples

夜中星ヲ量圖













Saturn in CNC & LEO 1-8-2005 - 1-9-2008

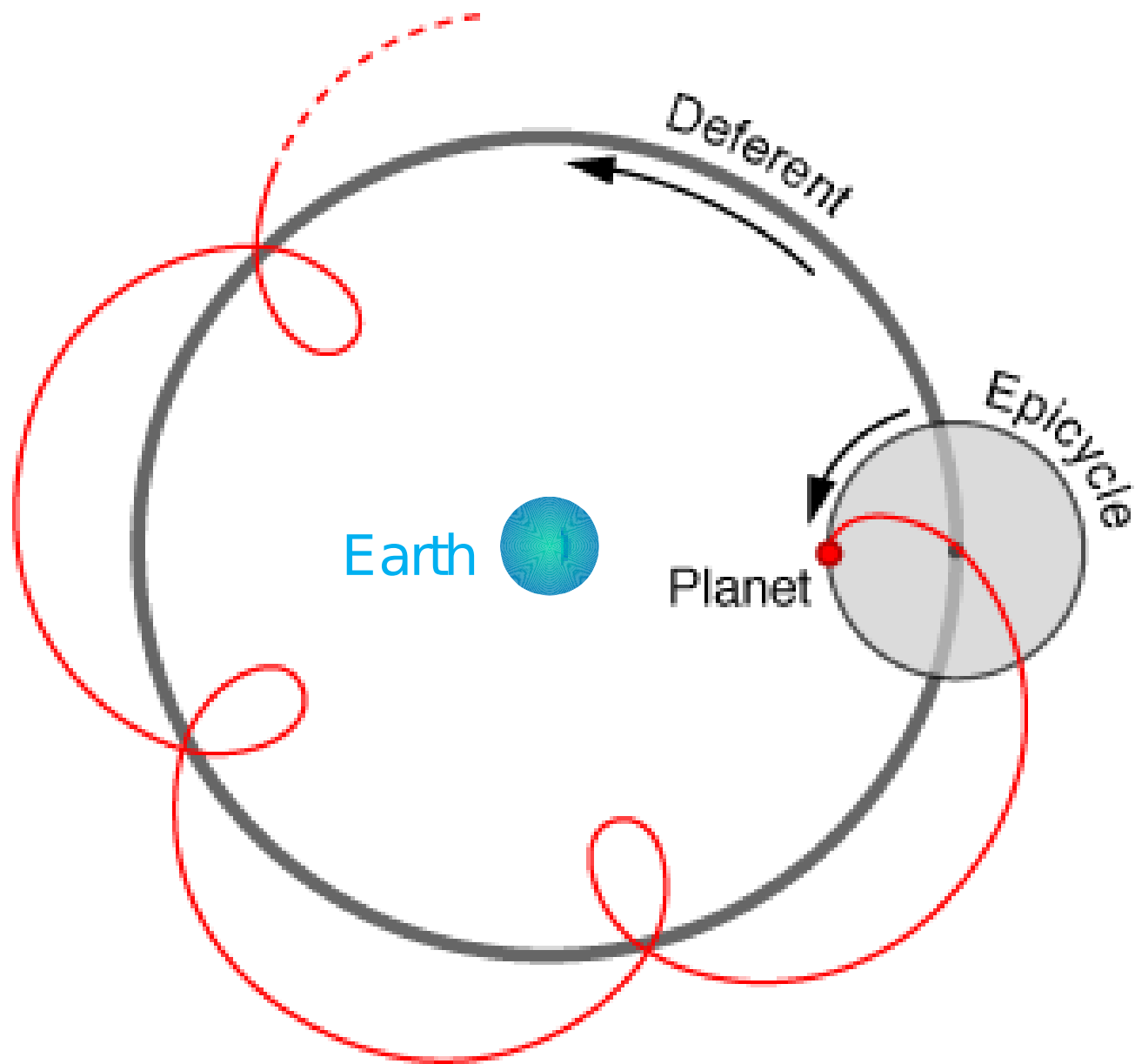
8-2005

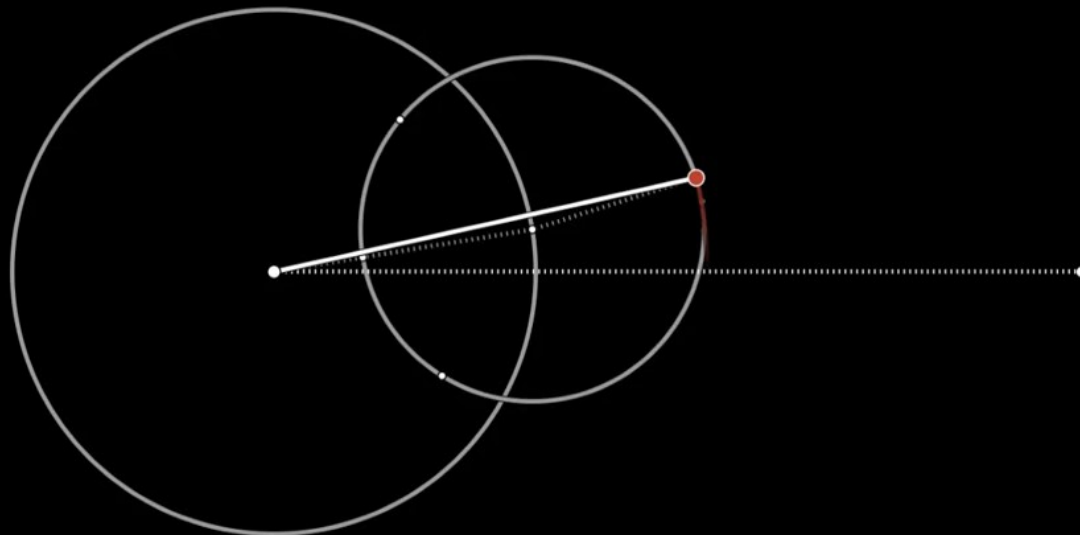
(c) Peter Wienerroither <http://homepage.univie.ac.at/~pww/>

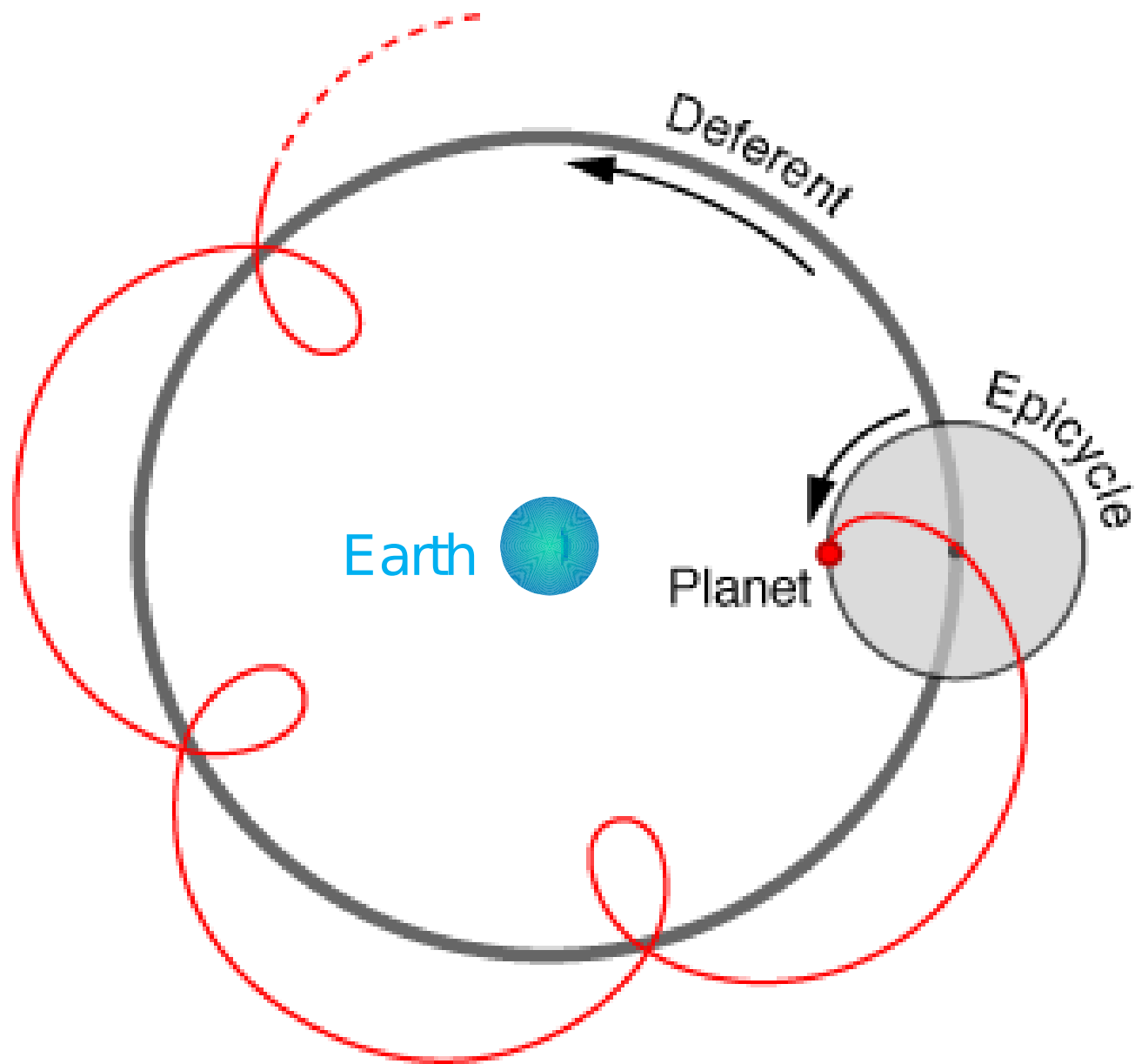


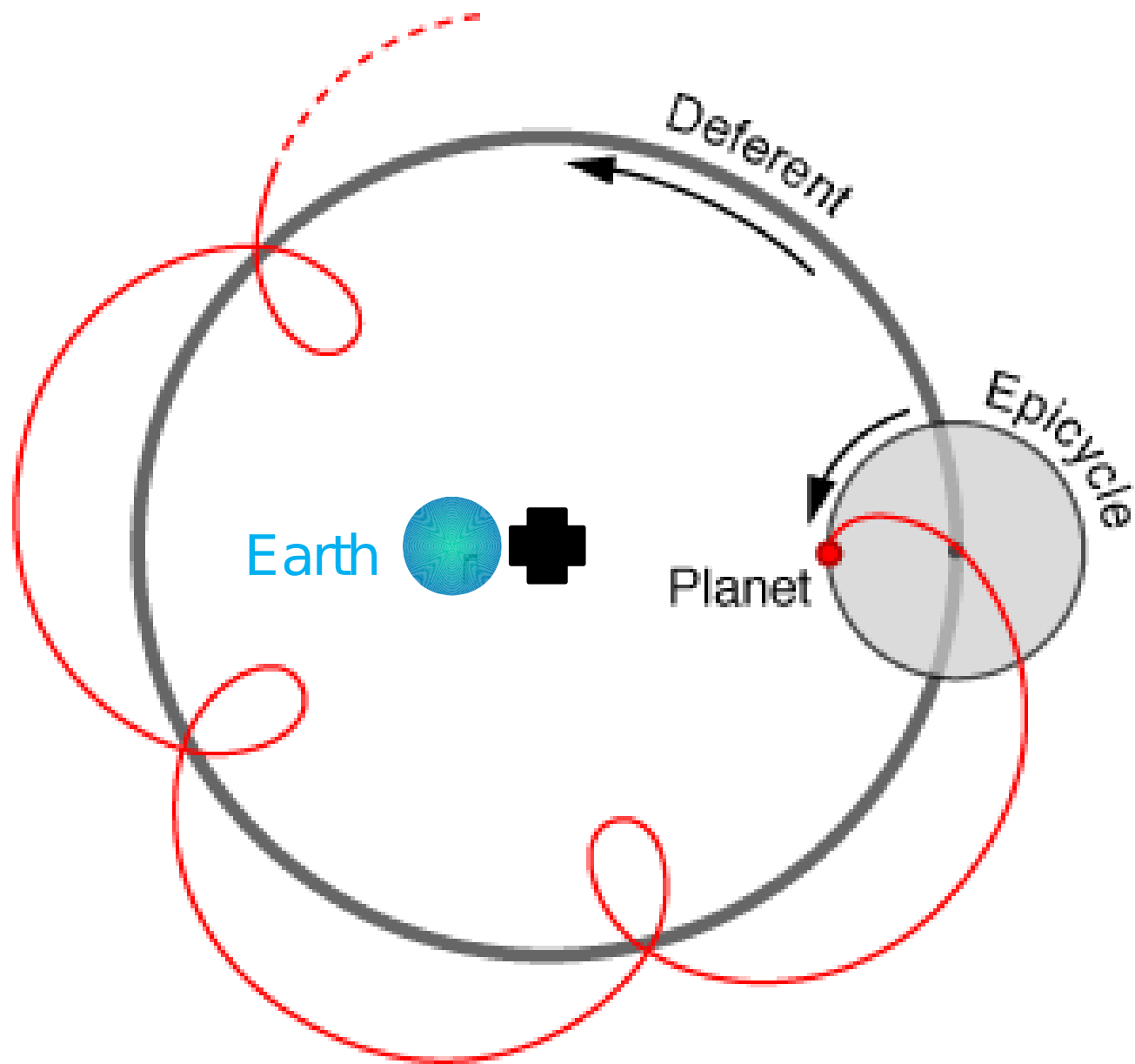
(C) 2011-2 Cenk E. Tezel
& Tunç Tezel

Cenk E. Tezel, Tunç Tezel



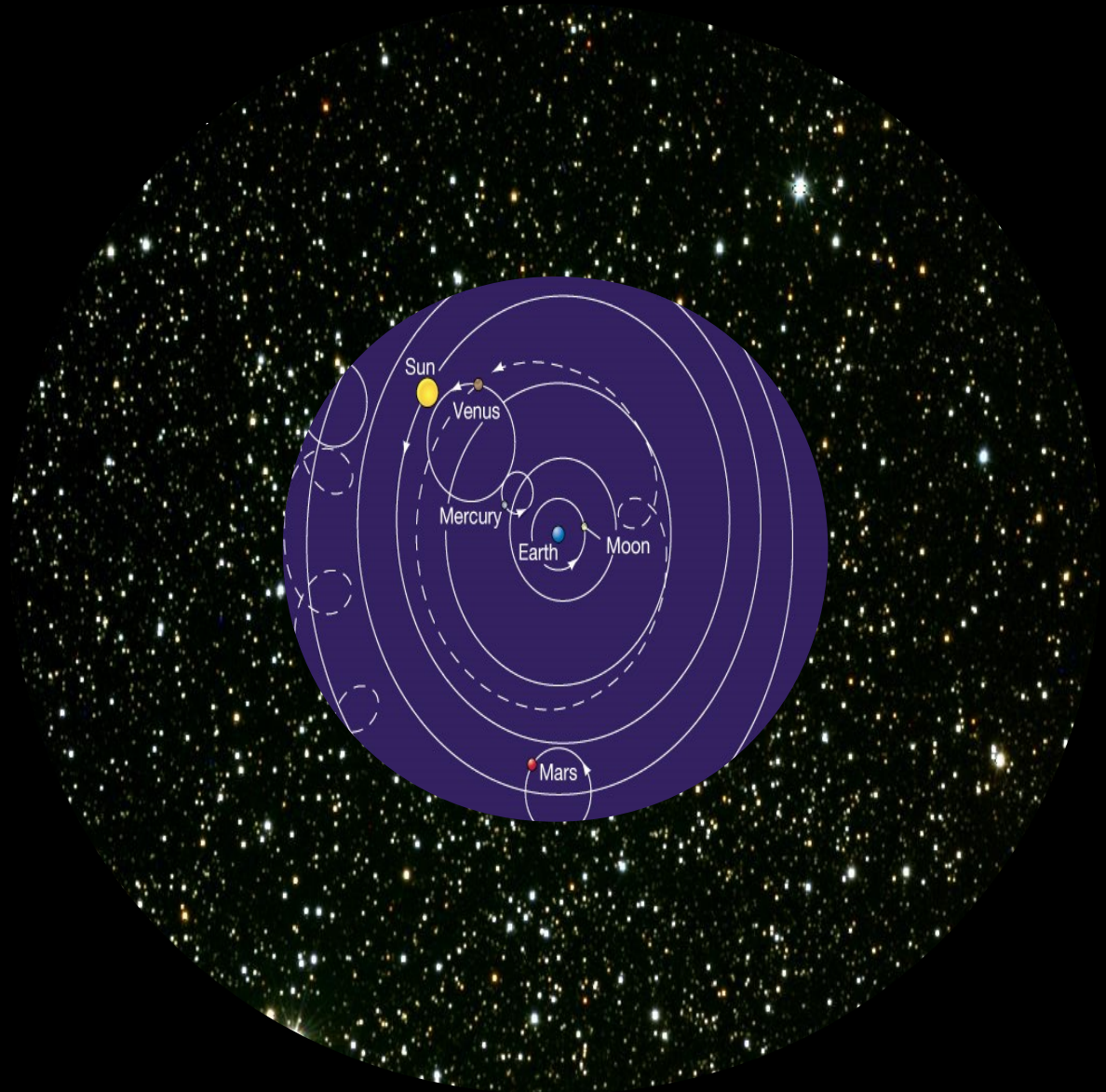






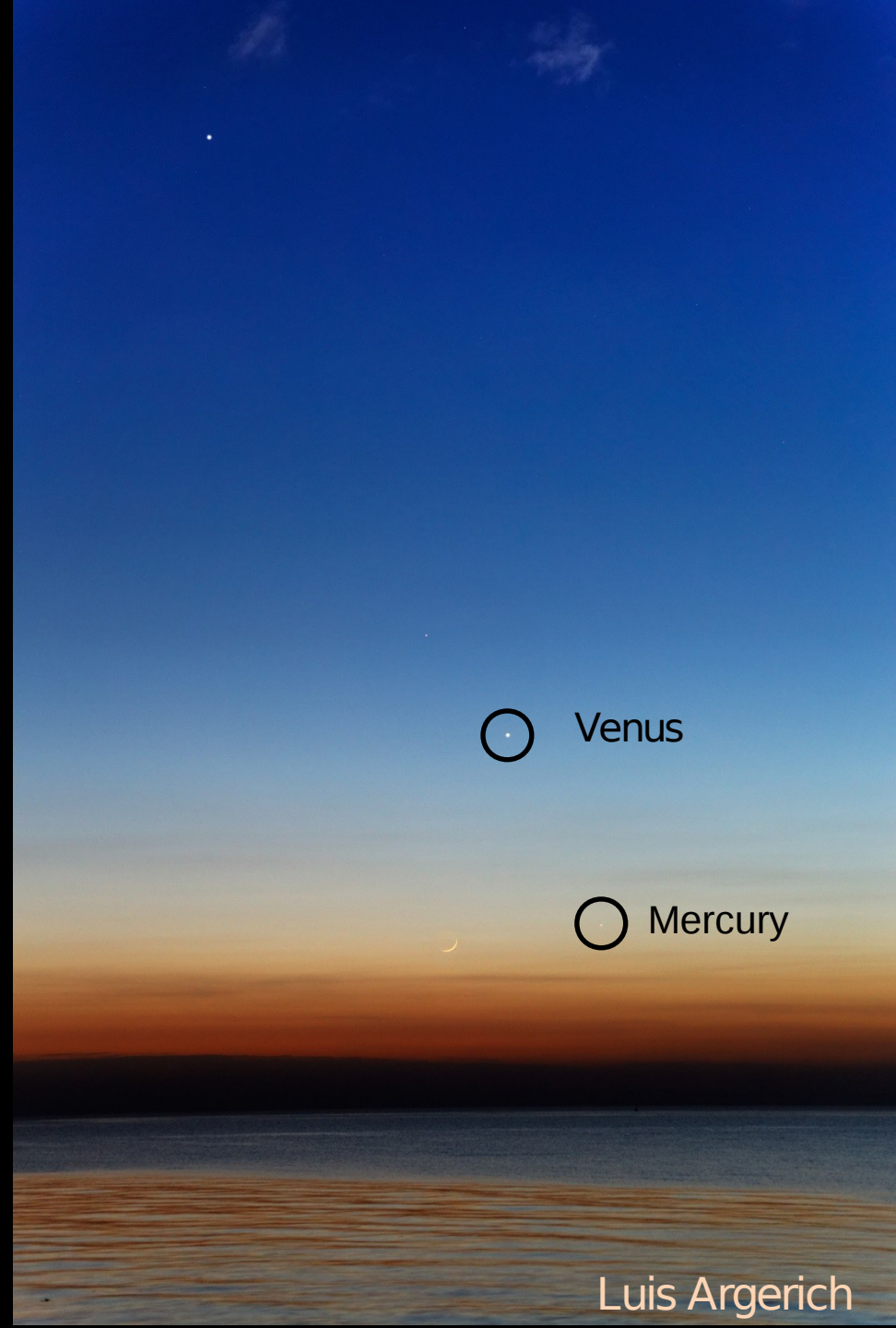


Claudius Ptolemy
(90-168)





Nicolaus
Copernicus
(1473-1543)





Venus-Mercury Conjunction (April 4th, 8th, 9th, 11th, 12th, 13th, 14th and 15th 2010)

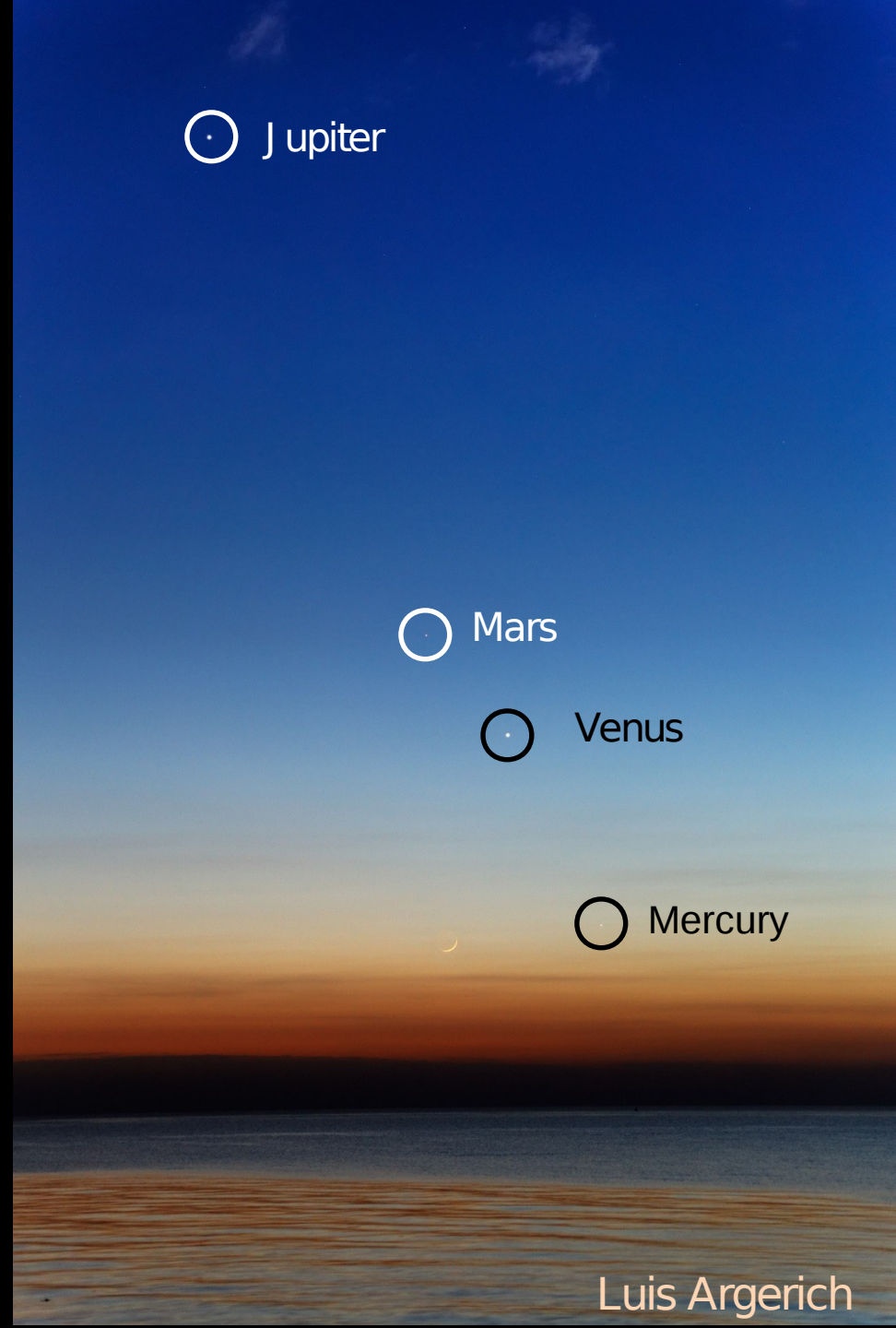
Composite of 8 images taken between 4-15 April 2010 at 19:50 UT. The crescent Moon is from the 15th April image

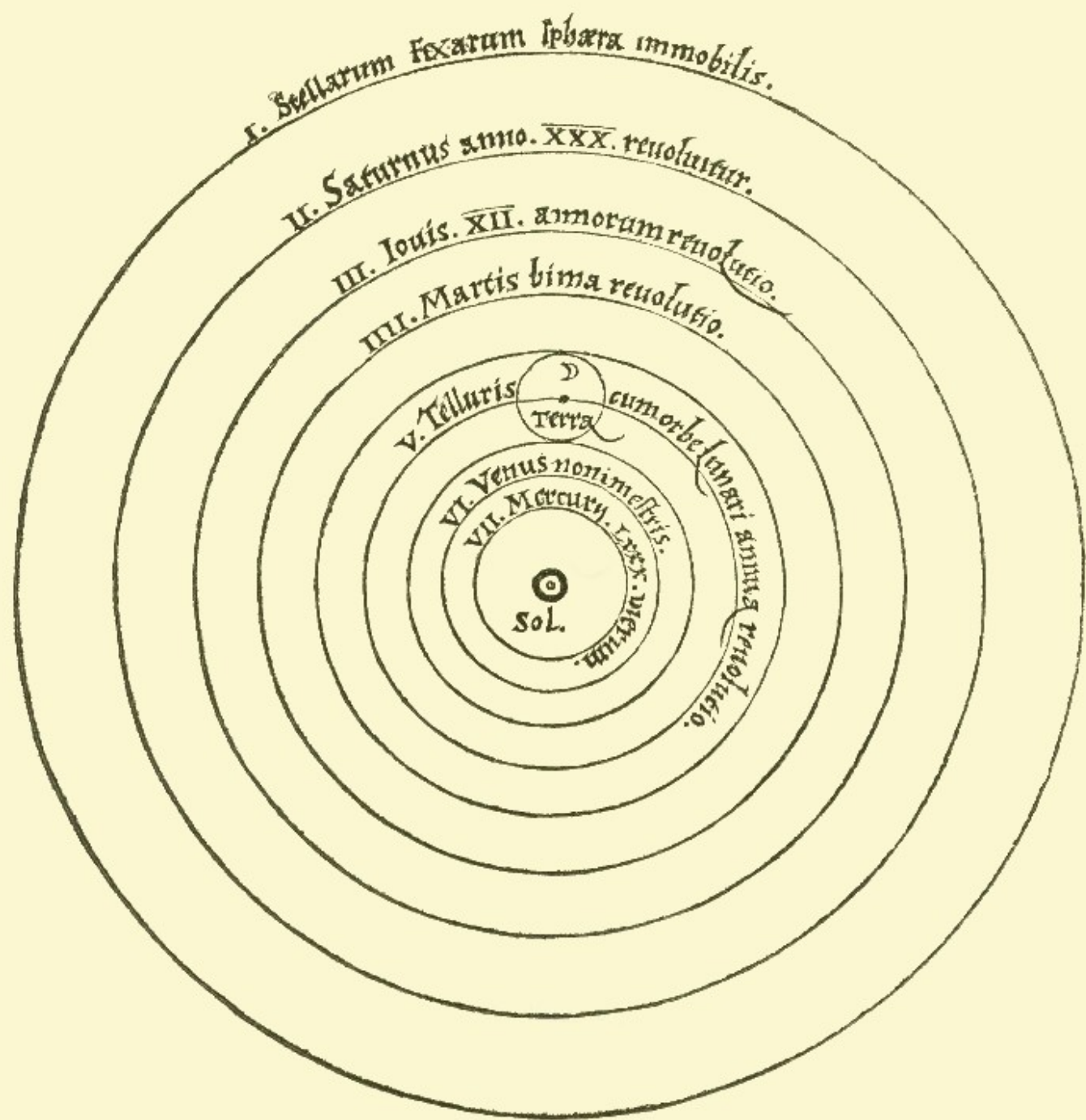
Peter Lawrence (Digital-Astronomy)

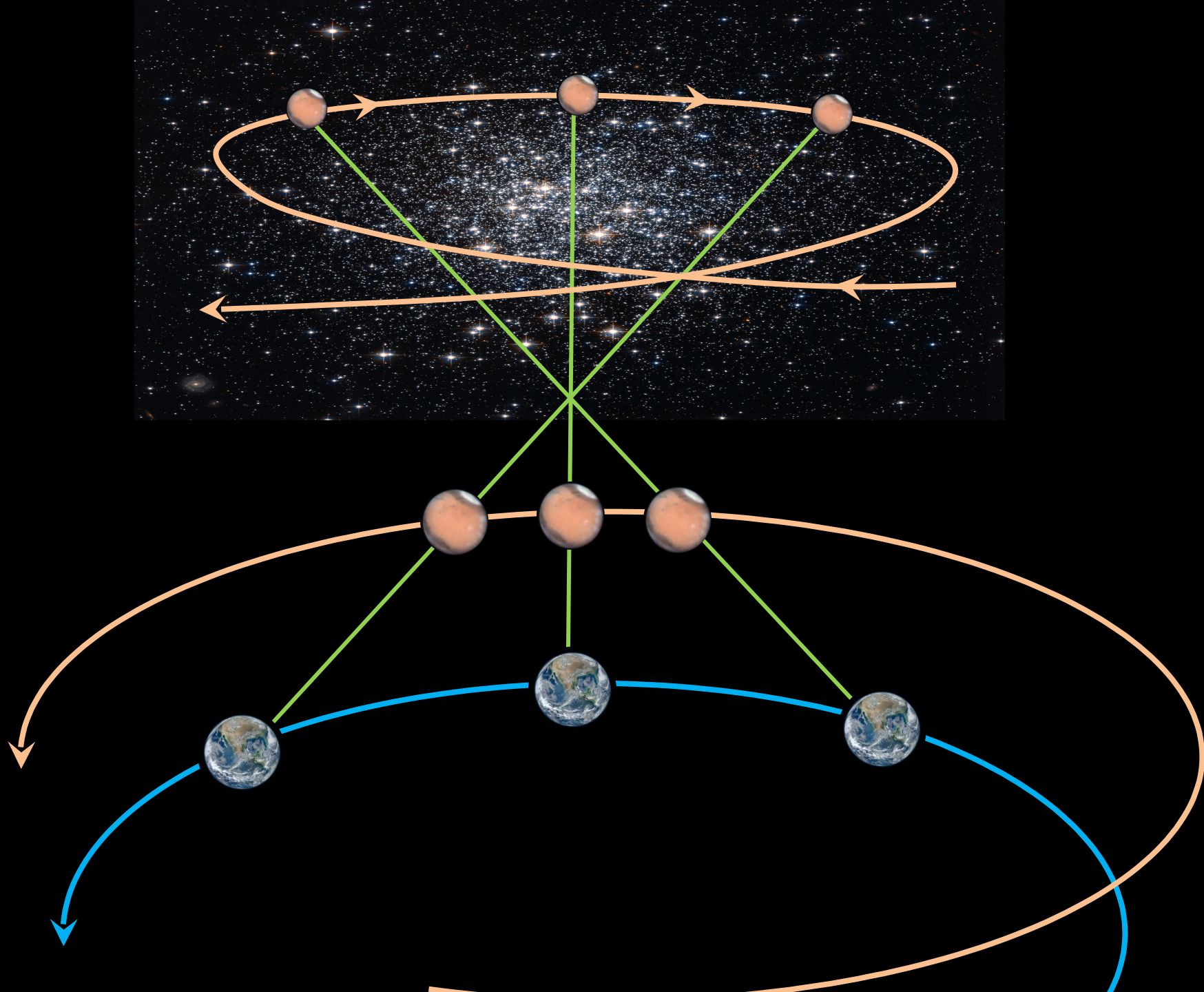
Pete Lawrence, UK



Nicolaus
Copernicus
(1473-1543)



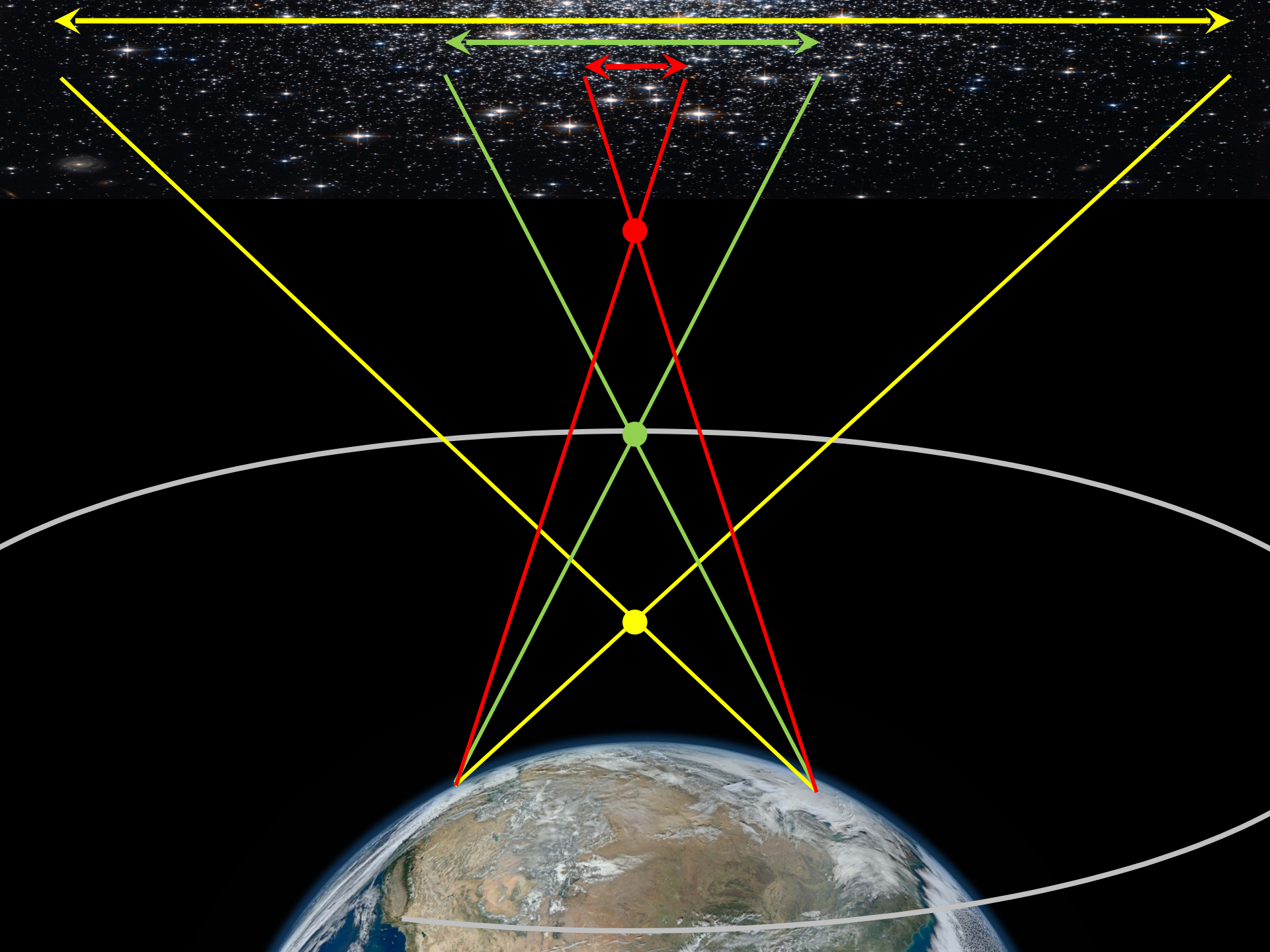


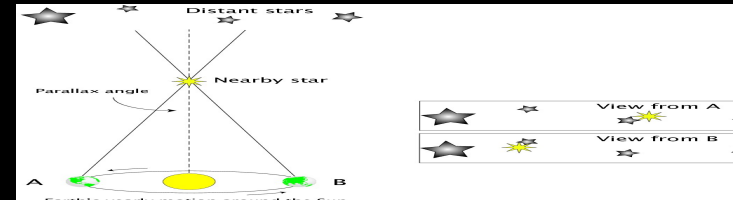
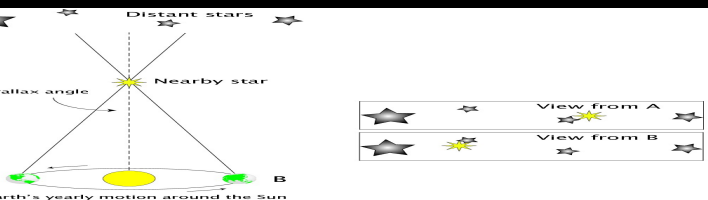
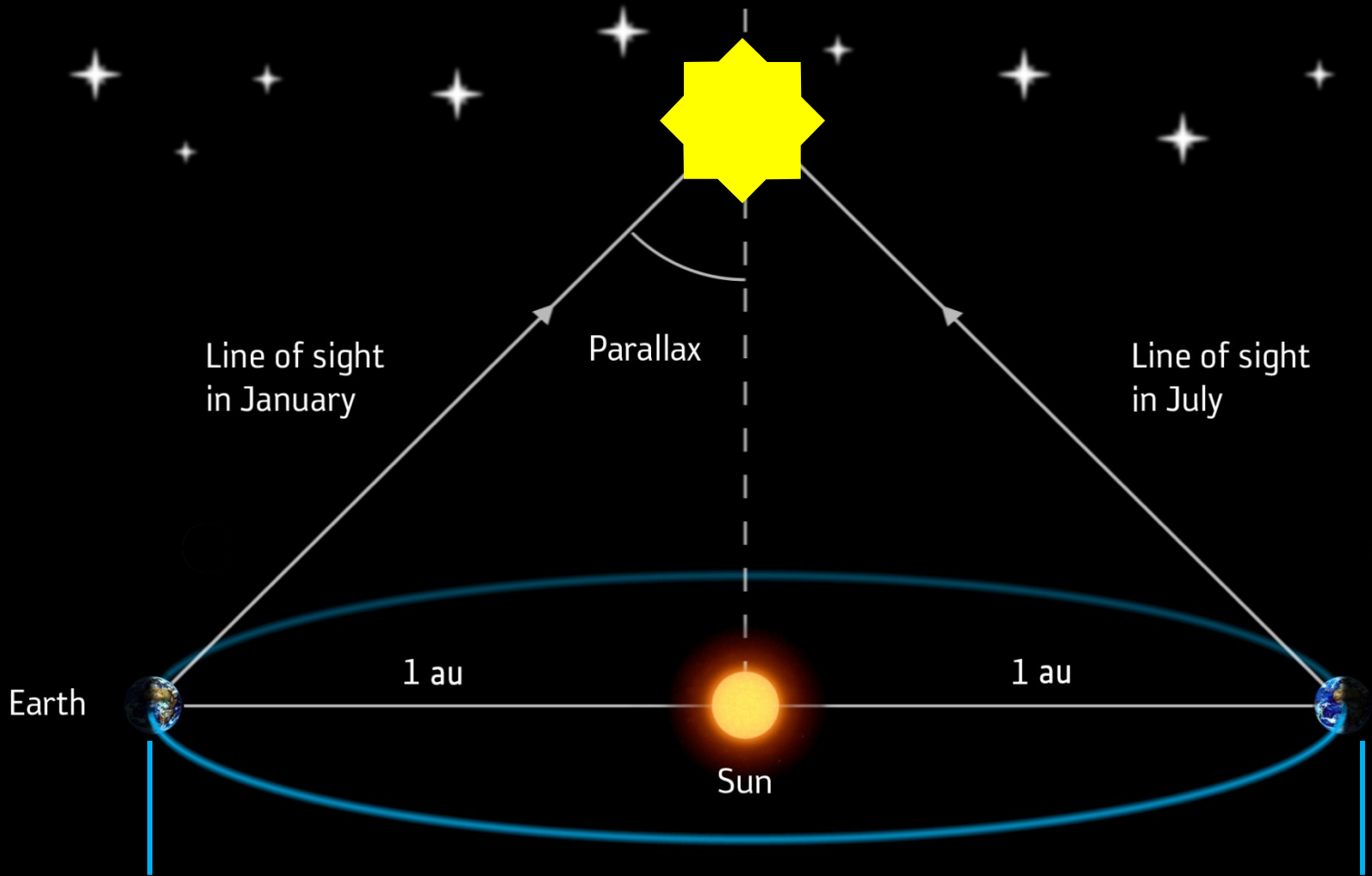
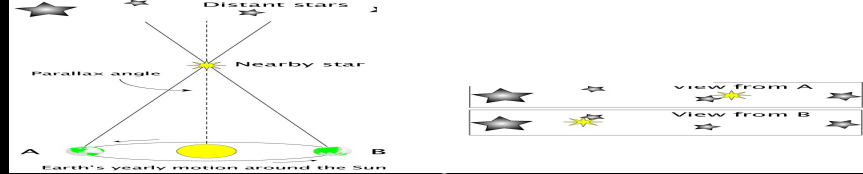




Tycho Brahe
(1546-1601)

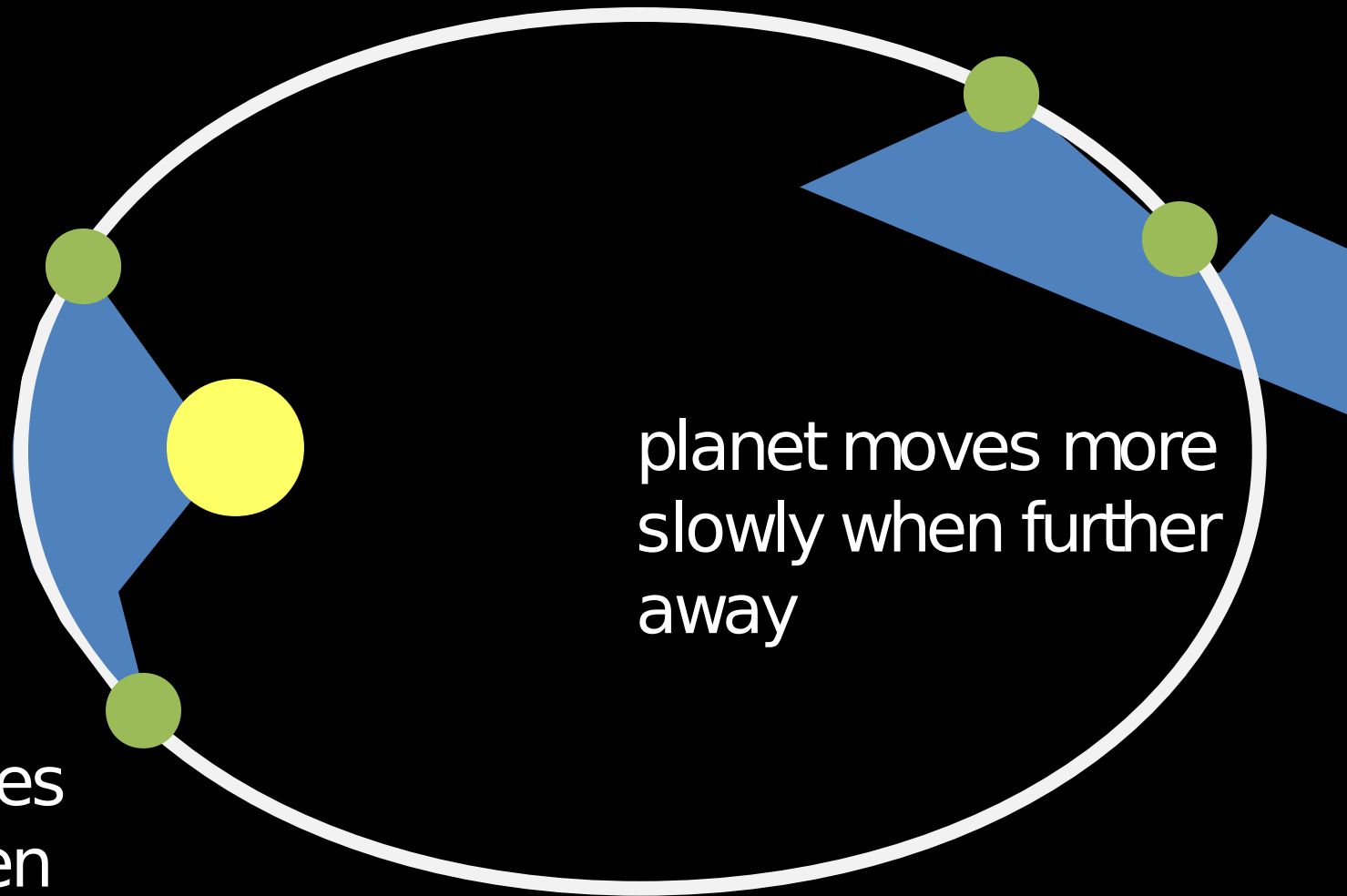








Johannes Kepler
(1571-1630)



planet moves
quickly when
close to the Sun

planet moves more
slowly when further
away

sweeps out equal
areas in equal times

Observations Jovianae 1610

2. J. Jovis.
marc H. 12

○ **

30. marc

** ○ *

2. Jovis.

○ ** *

3. marc

○ * *

3. Ho. 5.

* ○ *

4. marc

* ○ **

6. marc

** ○ *

8. marc H. 13.

* * * ○

10. marc

* * * ○ *

11.

* * ○ *

12. H. 4. uel.

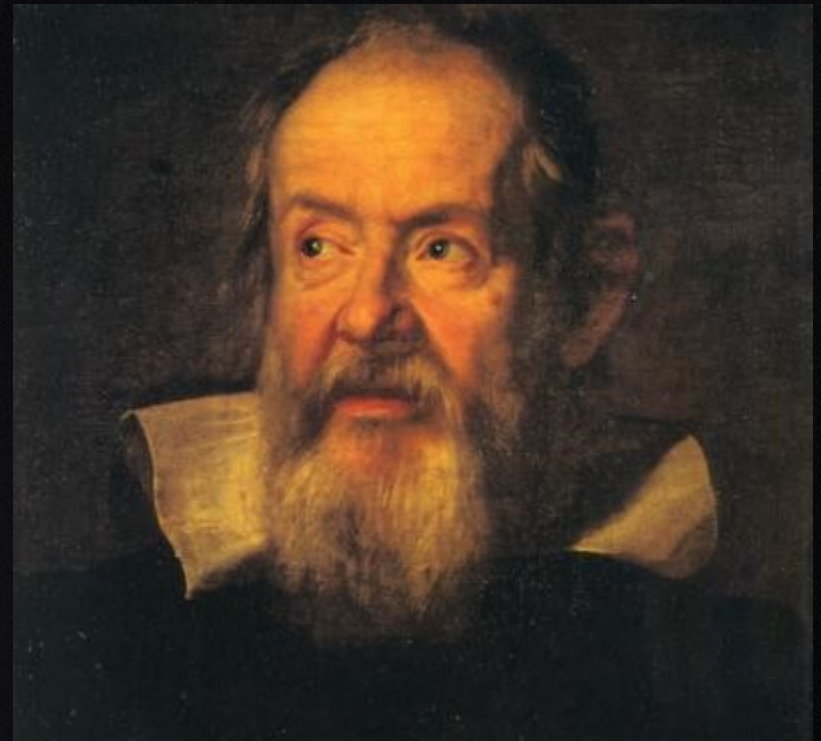
* ○ *

13. marc

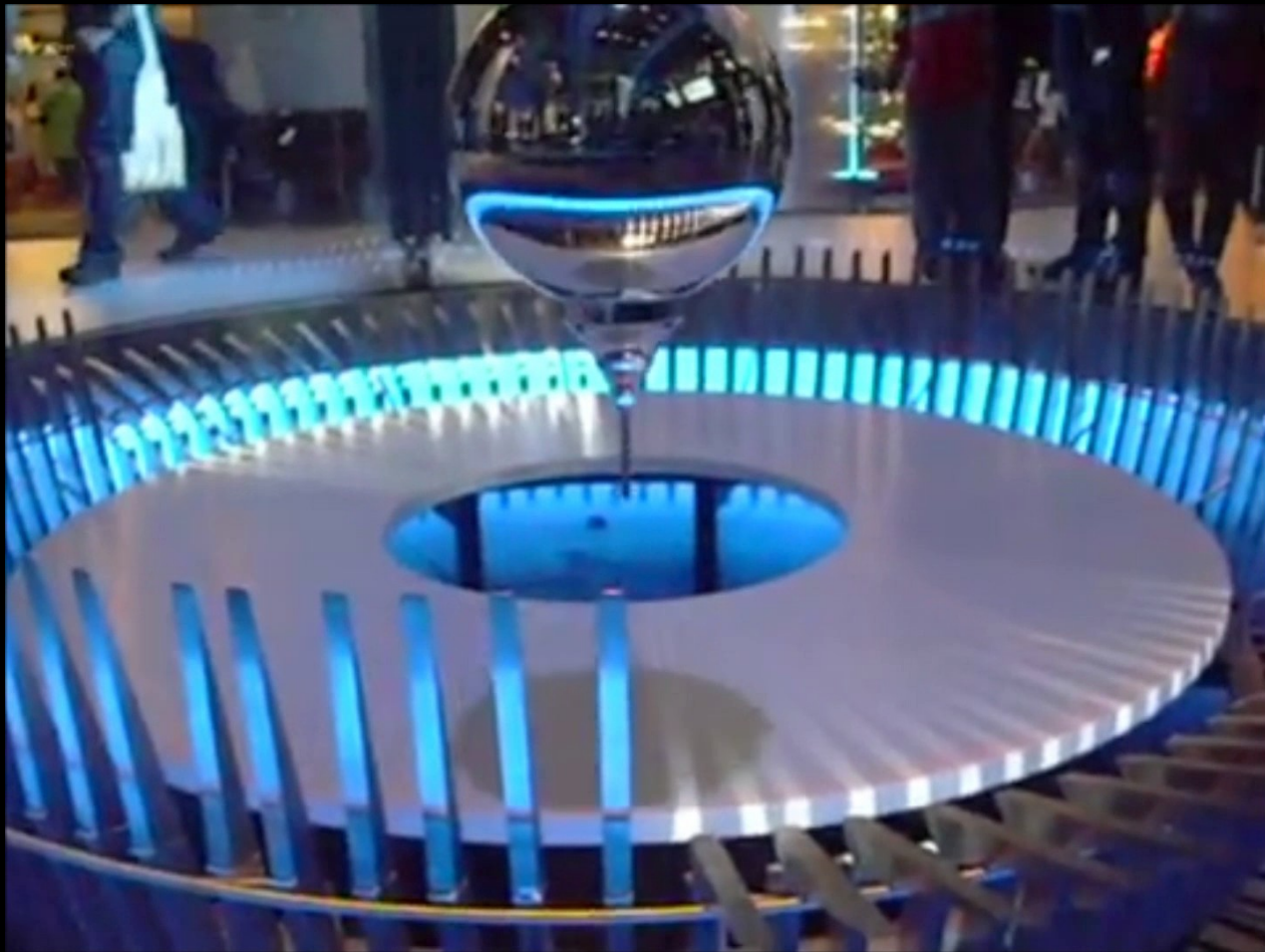
* ** ○ *

14. Jovis.

* * * ○ *



Galileo Galilei
(1564-1642)



Chicago Museum of Science and Industry

Celestial sphere

North pole

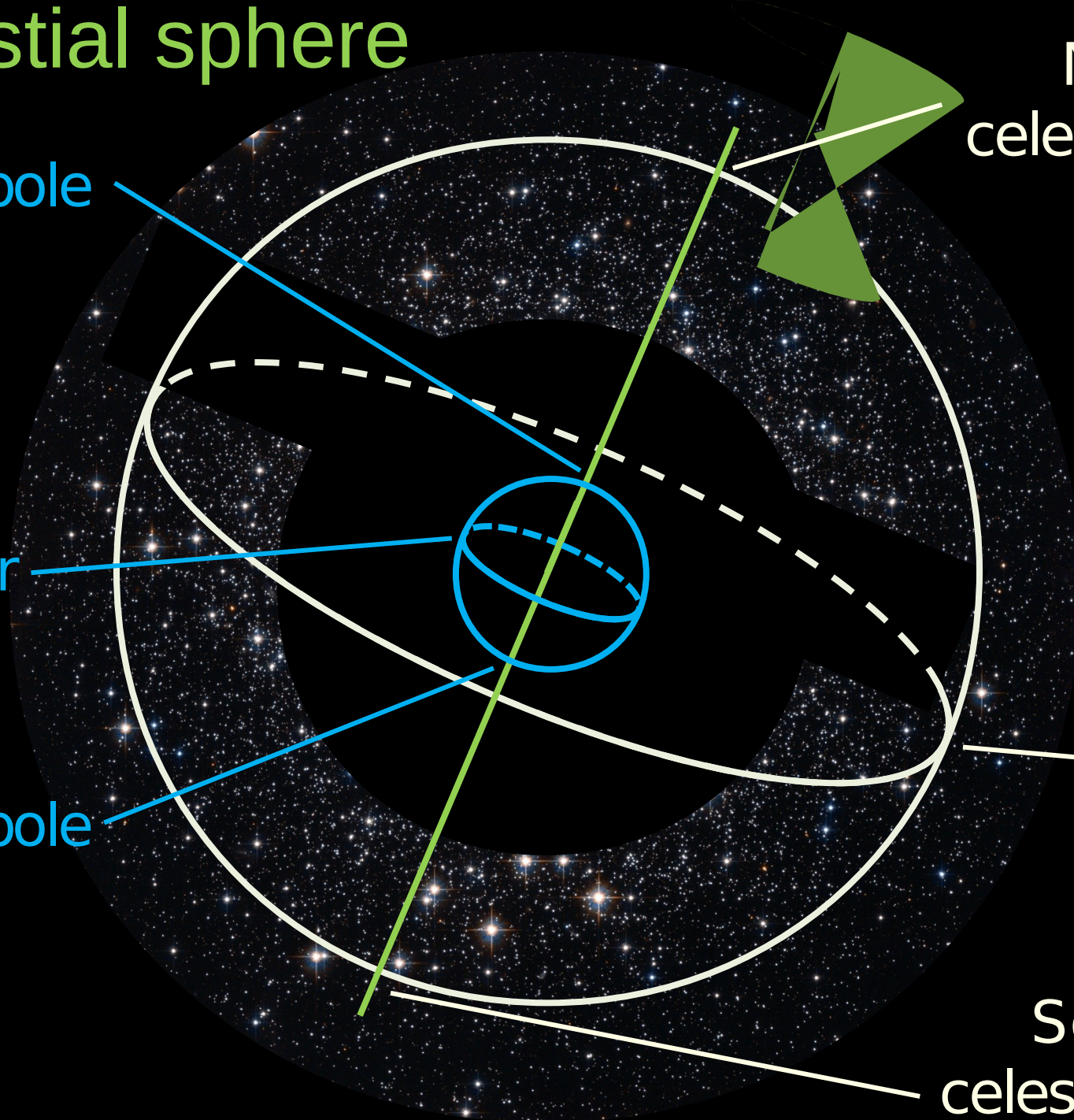
equator

South pole

North
celestial pole

celestial
equator

South
celestial pole









© KWON, O CHUL

Kwon O Chul



Celestial sphere

North pole

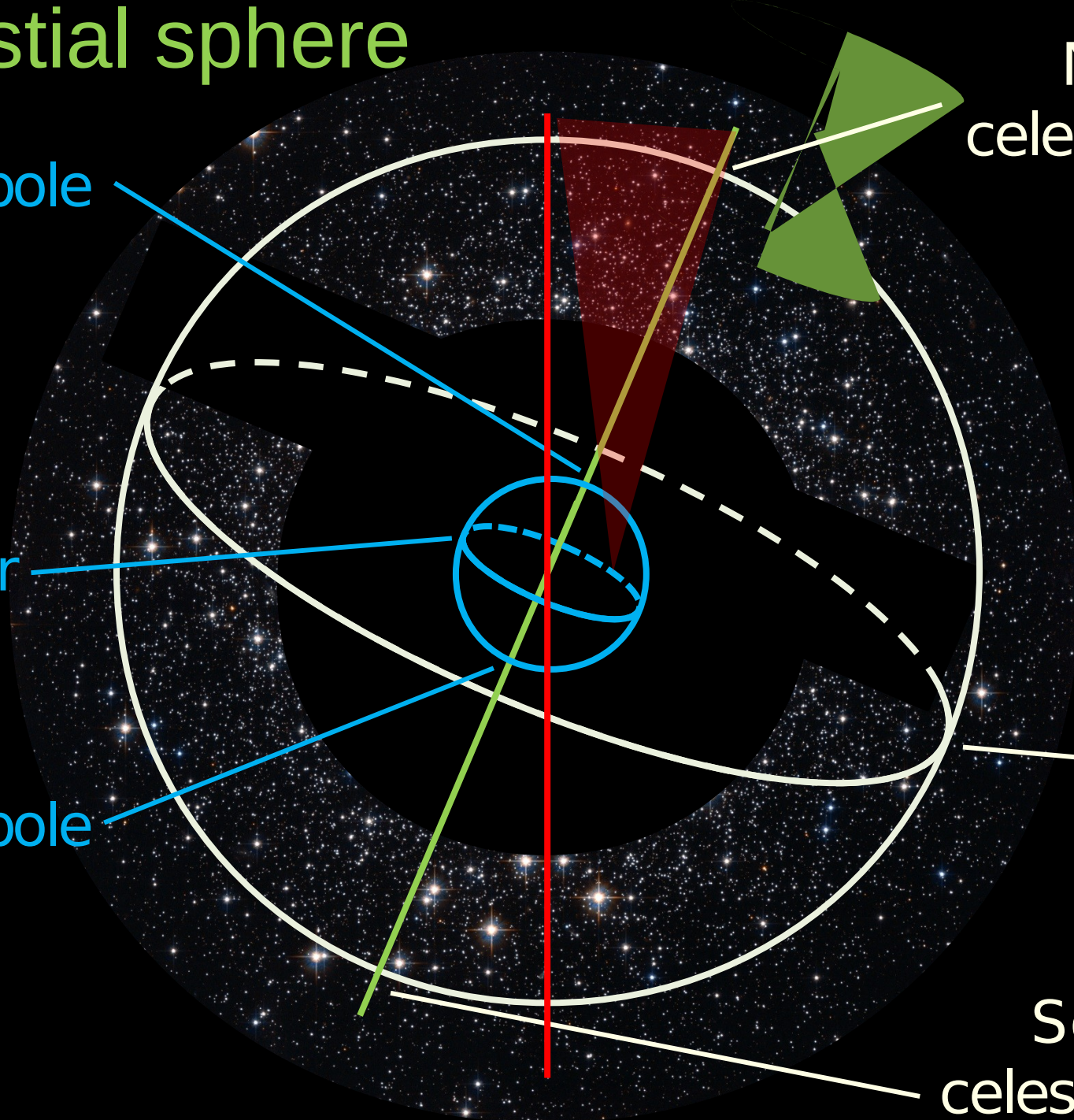
equator

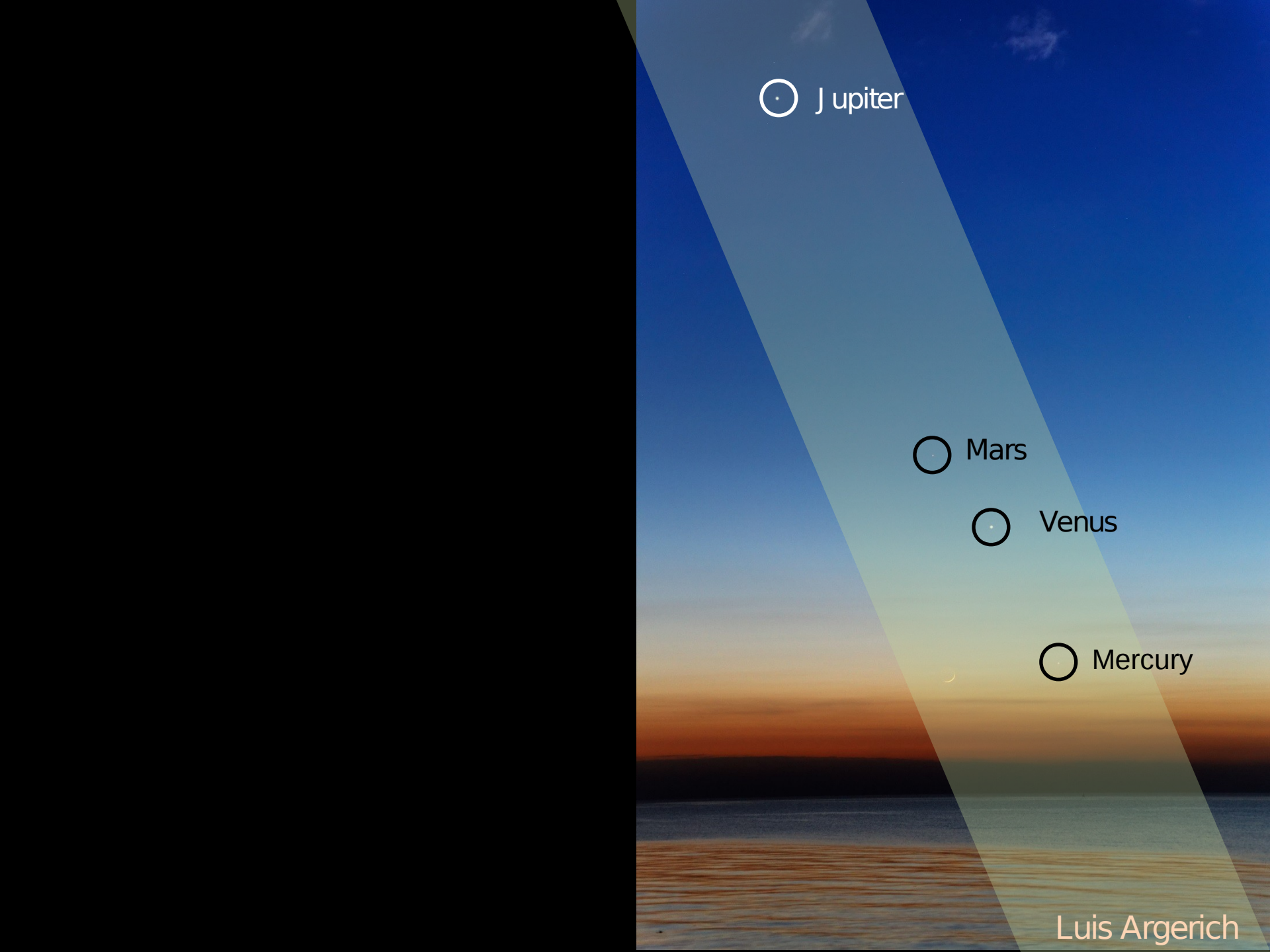
South pole

North
celestial pole

celestial
equator

South
celestial pole





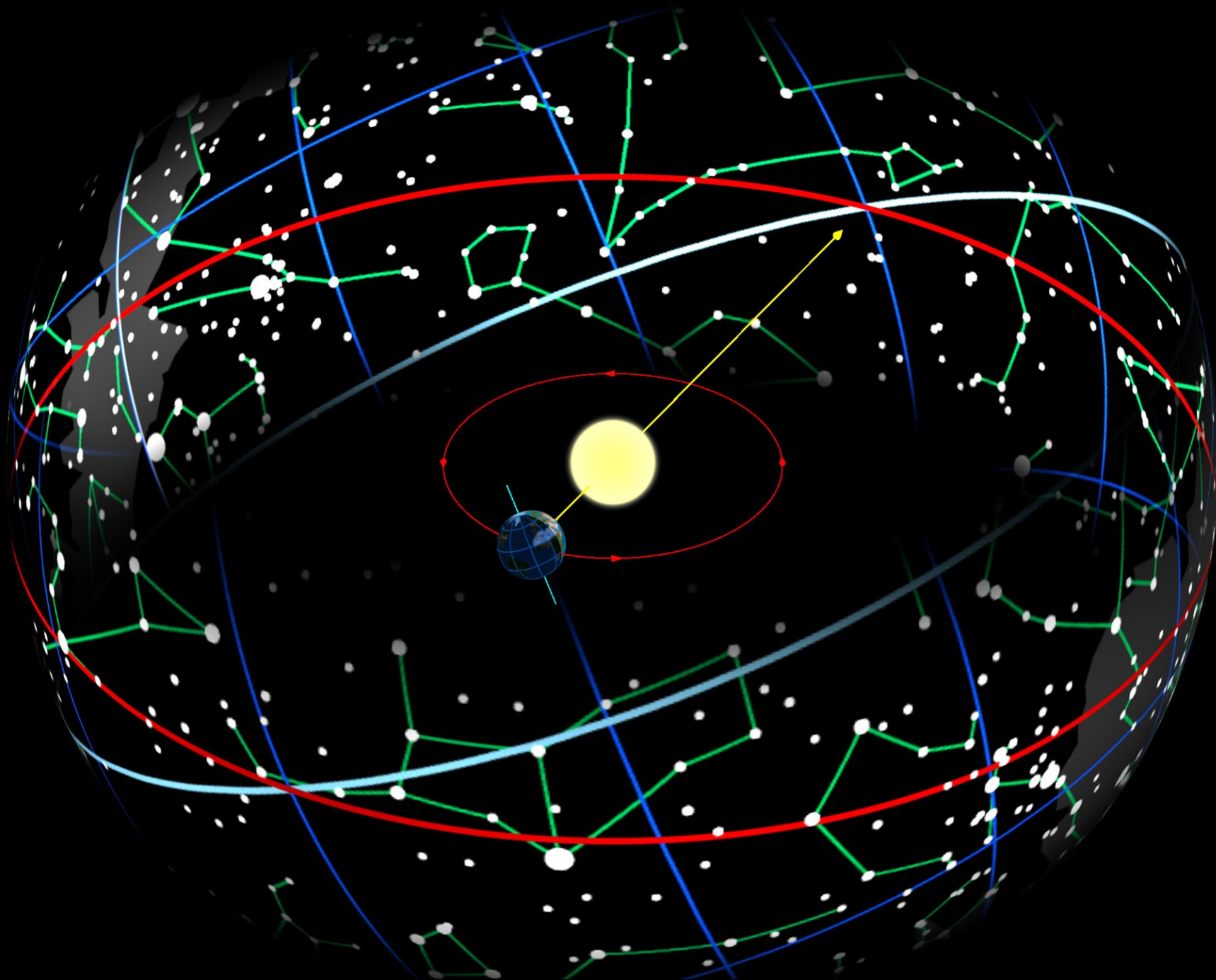
Jupiter

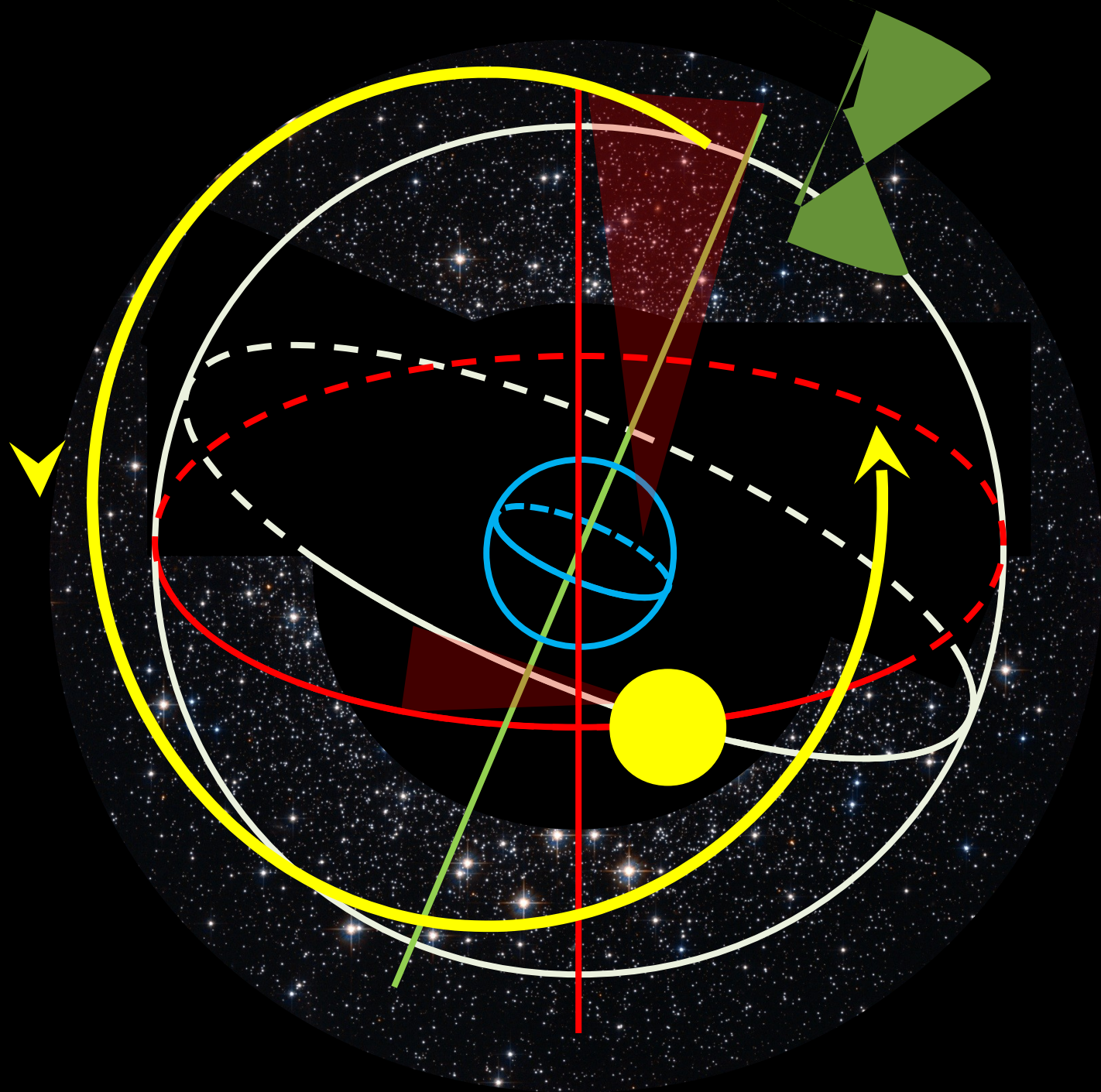
Mars

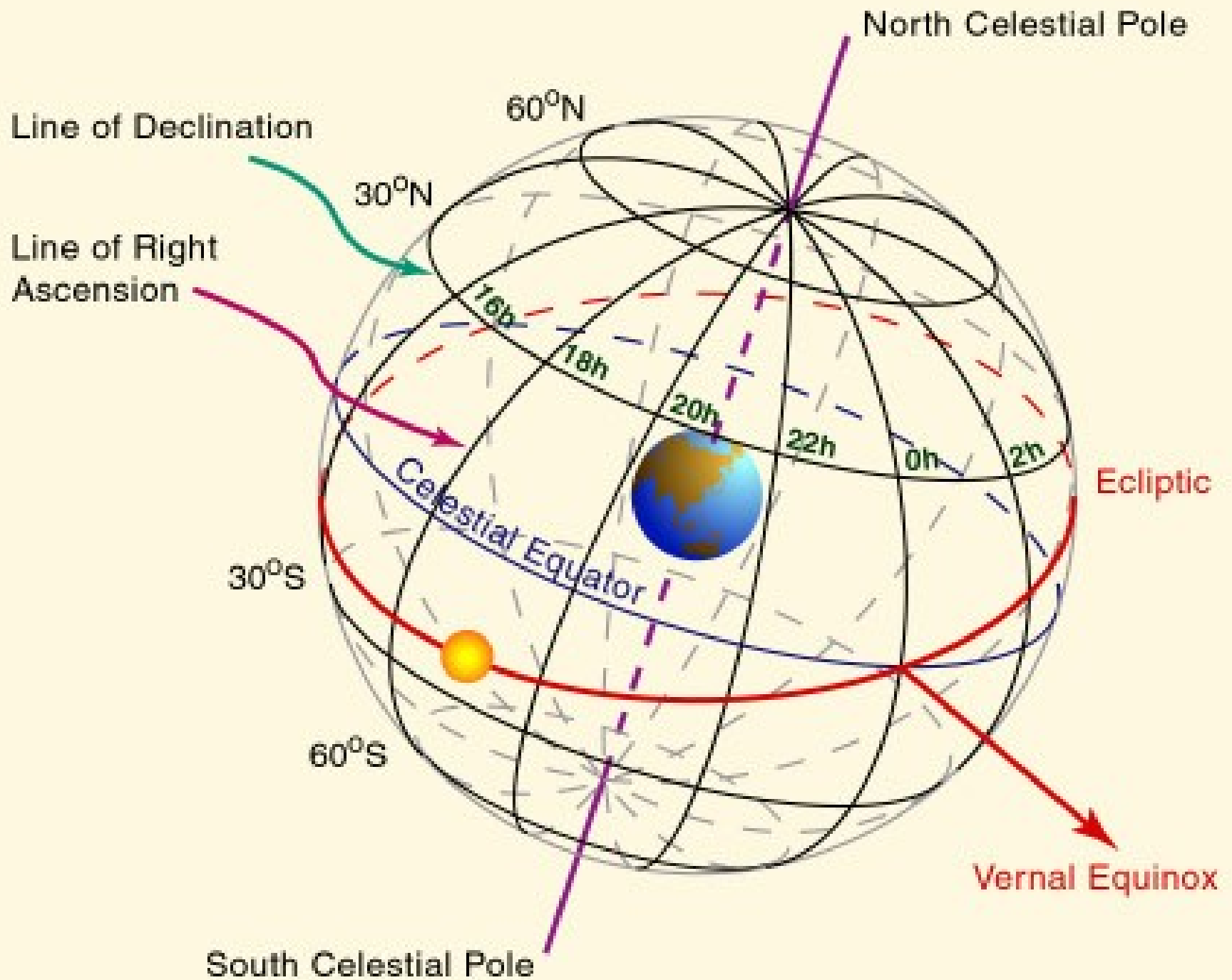
Venus

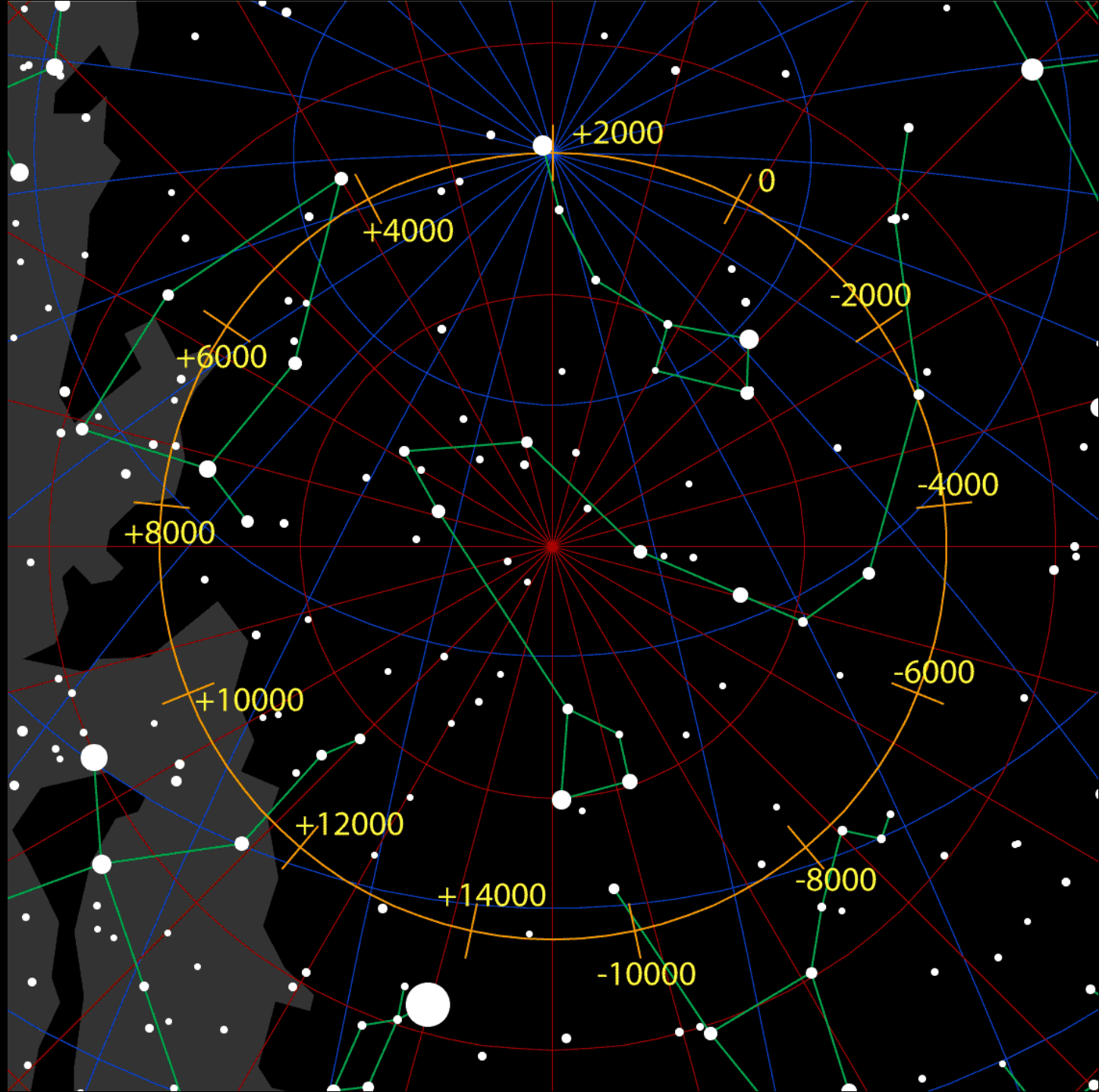
Mercury

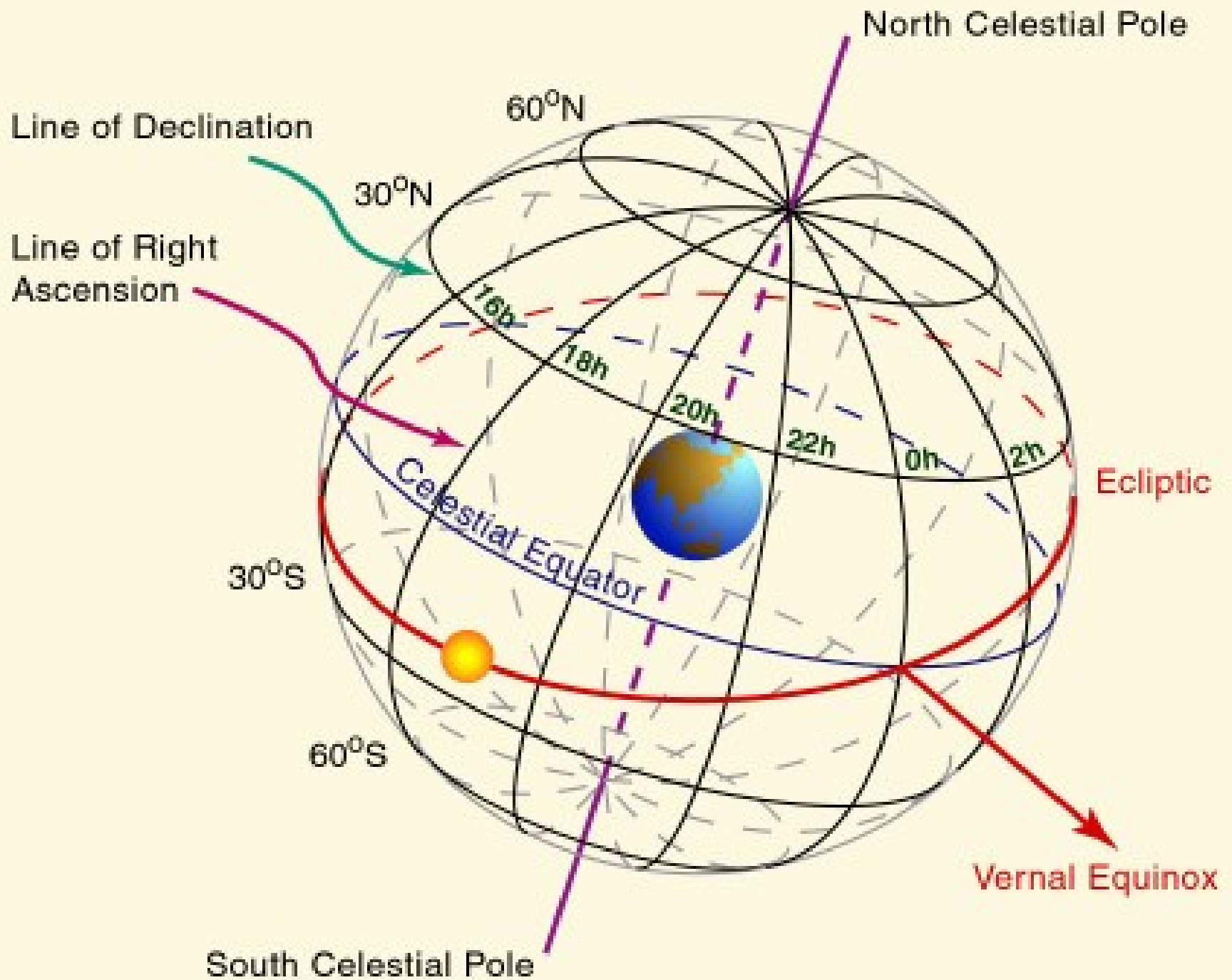
Luis Argerich

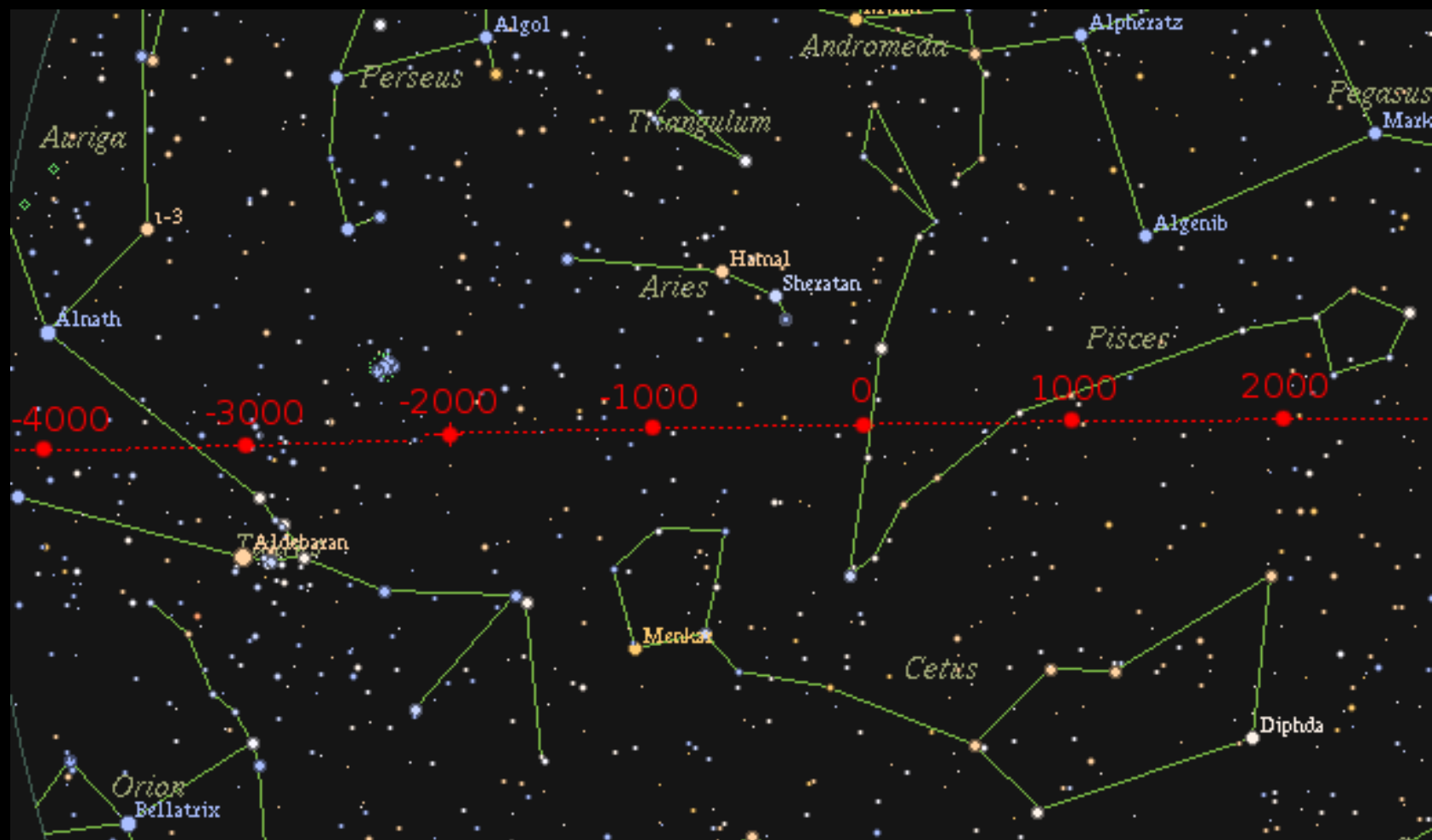


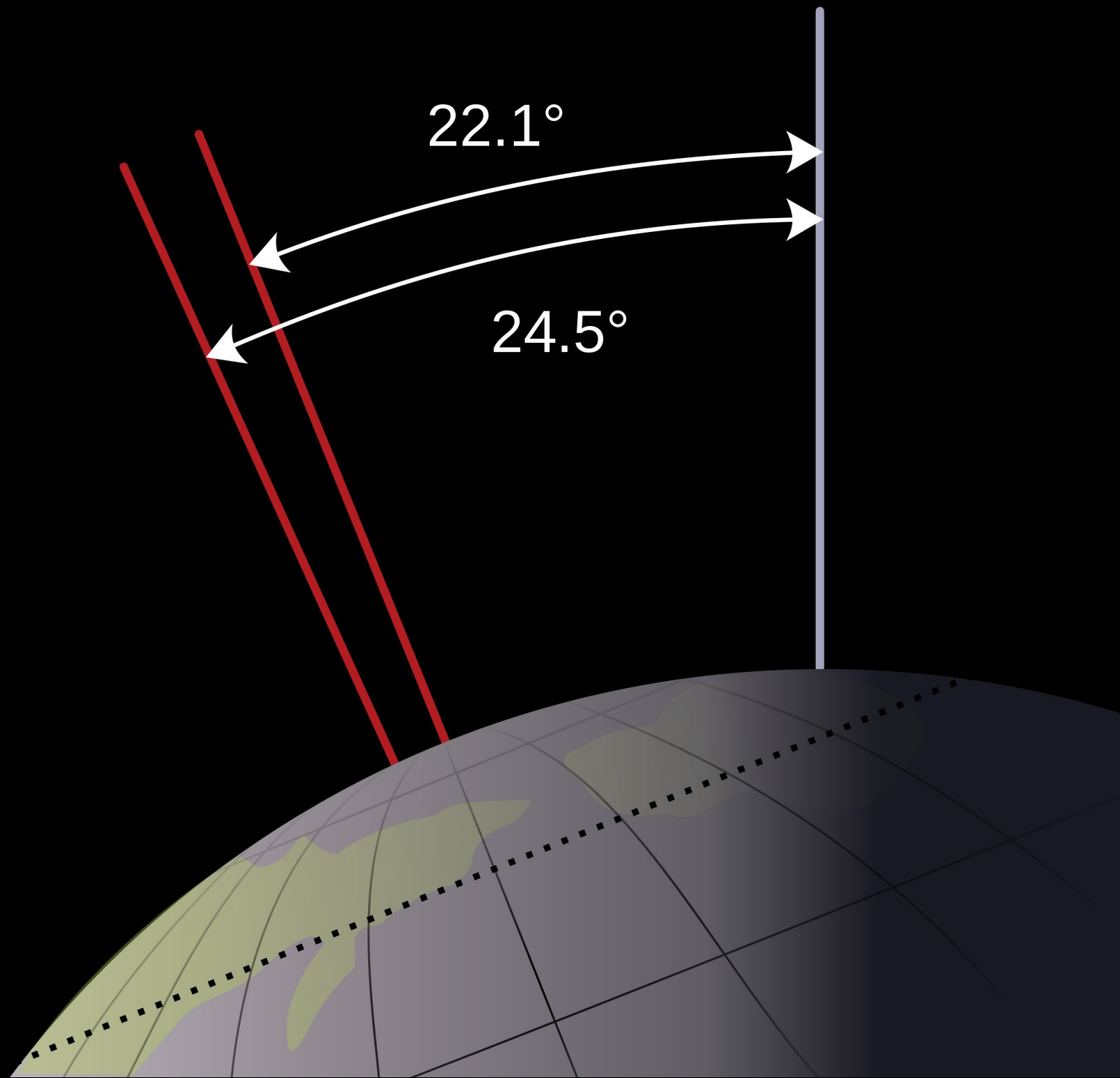


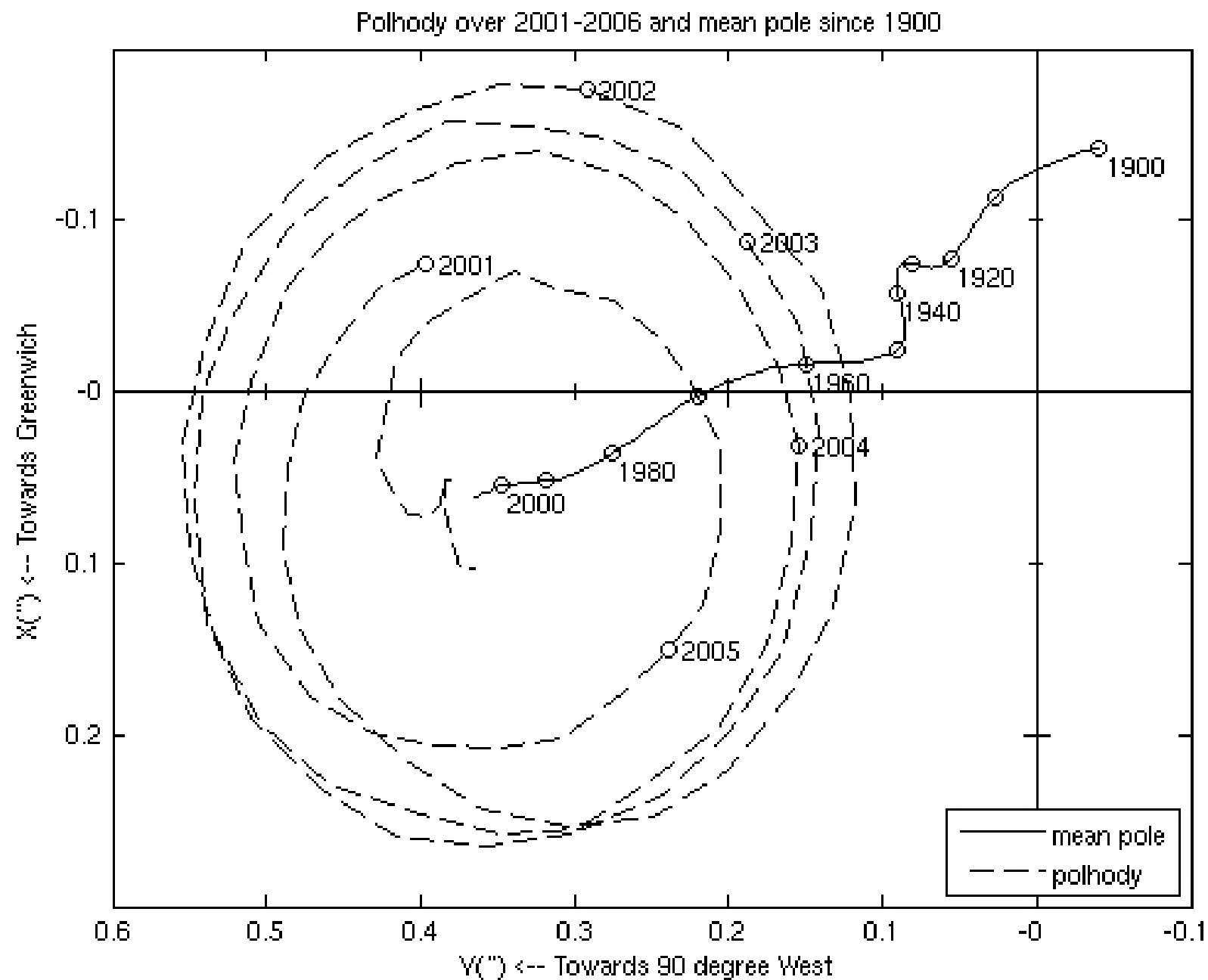


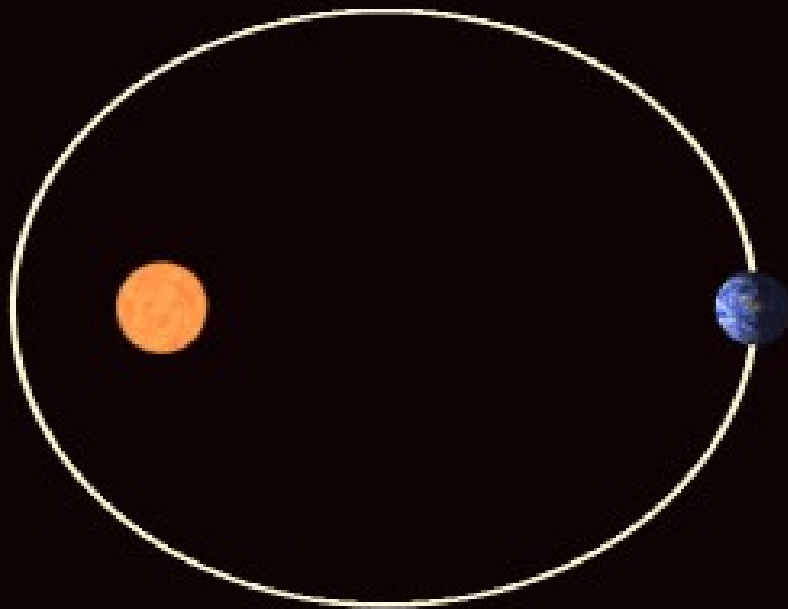


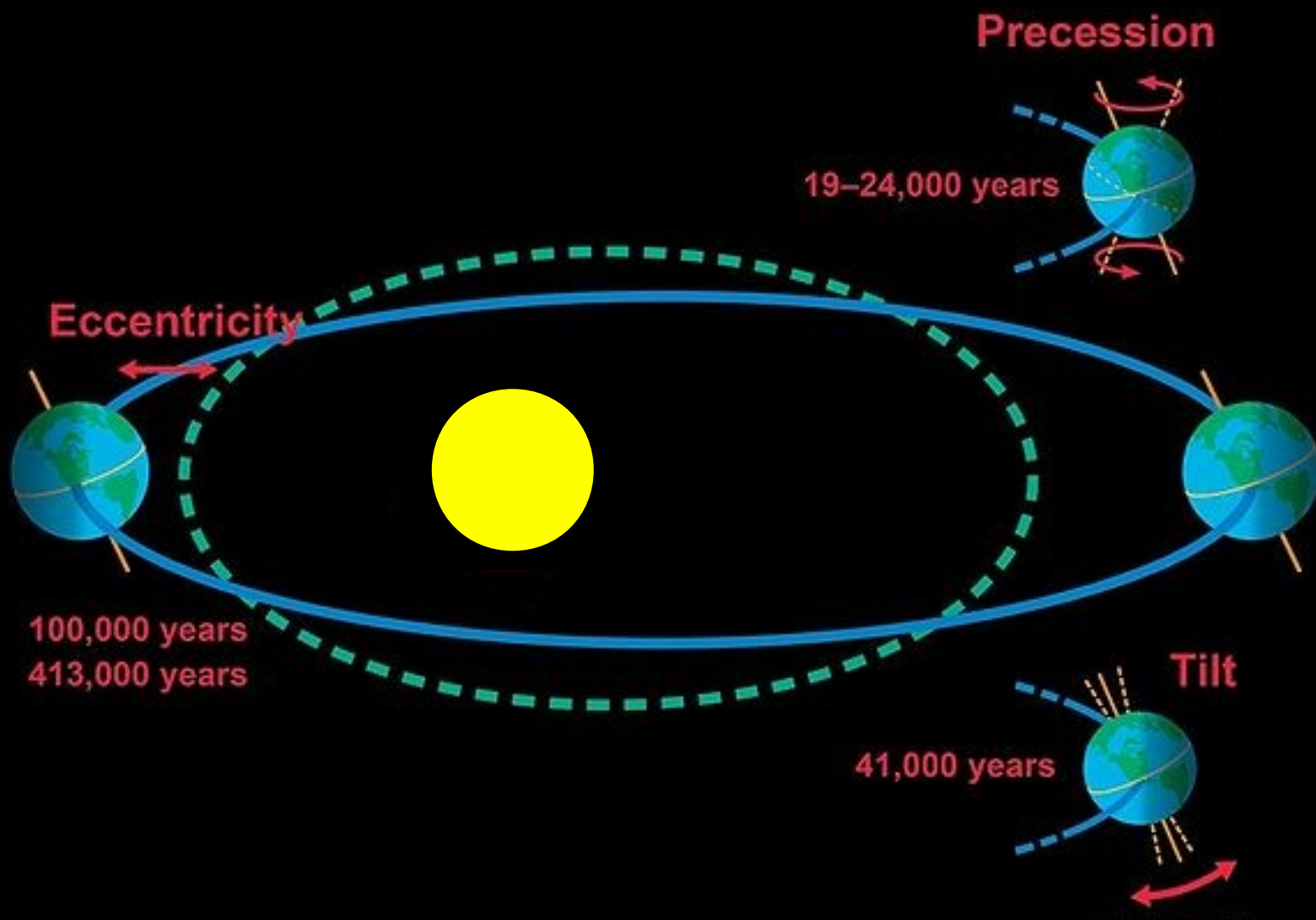


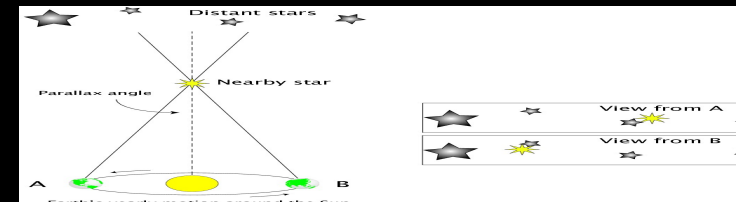
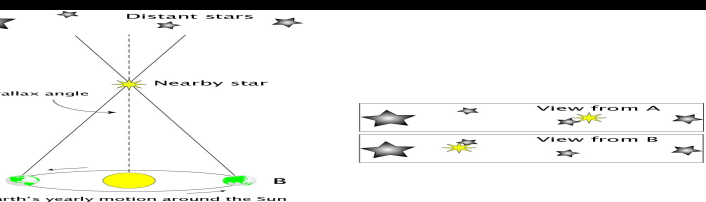
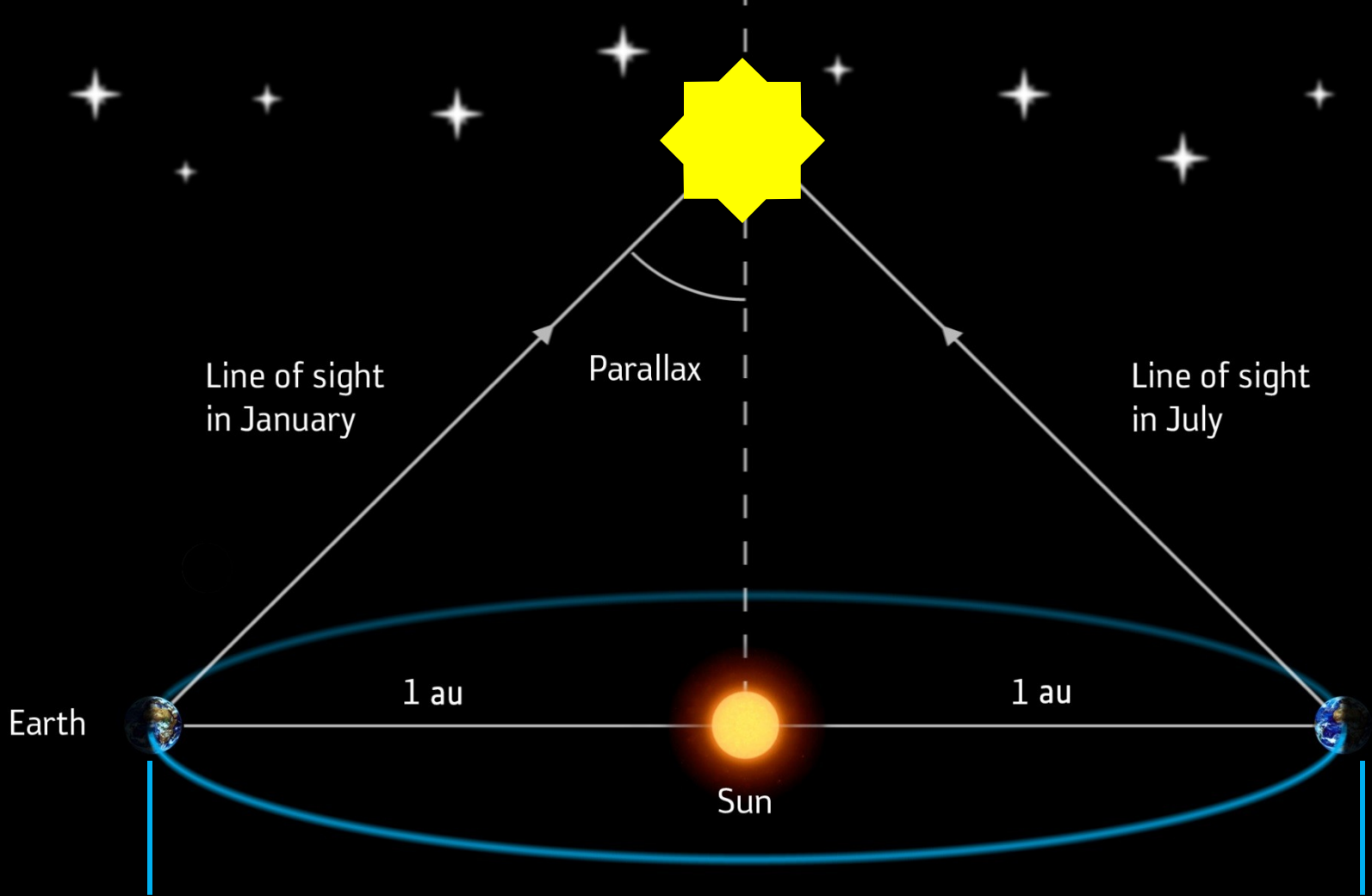
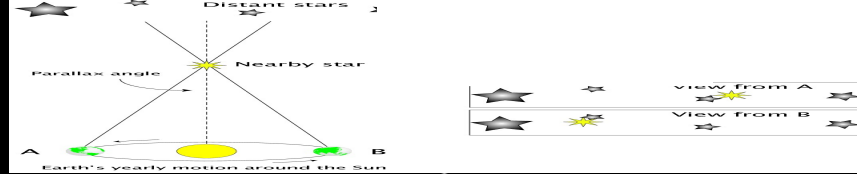


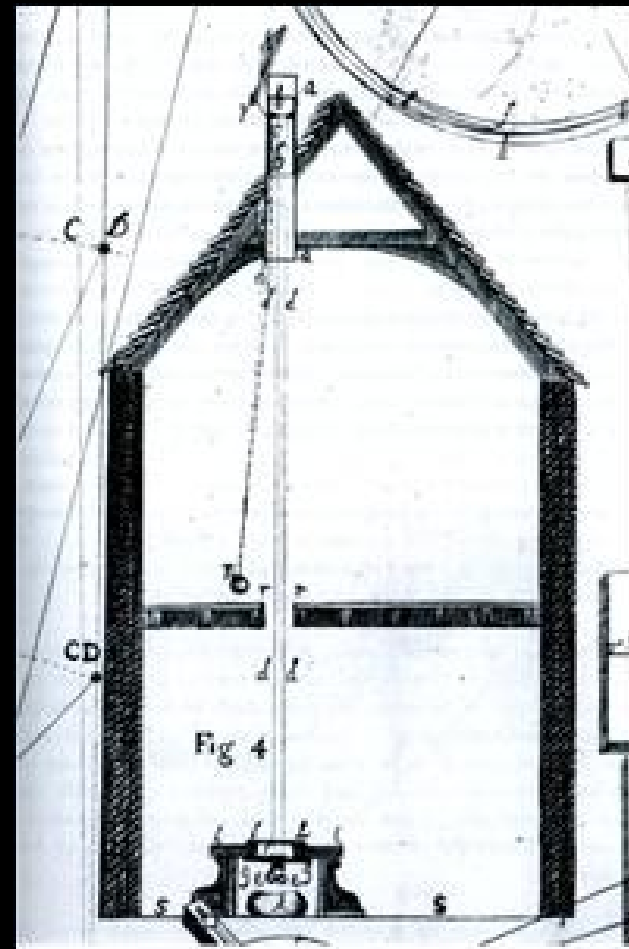


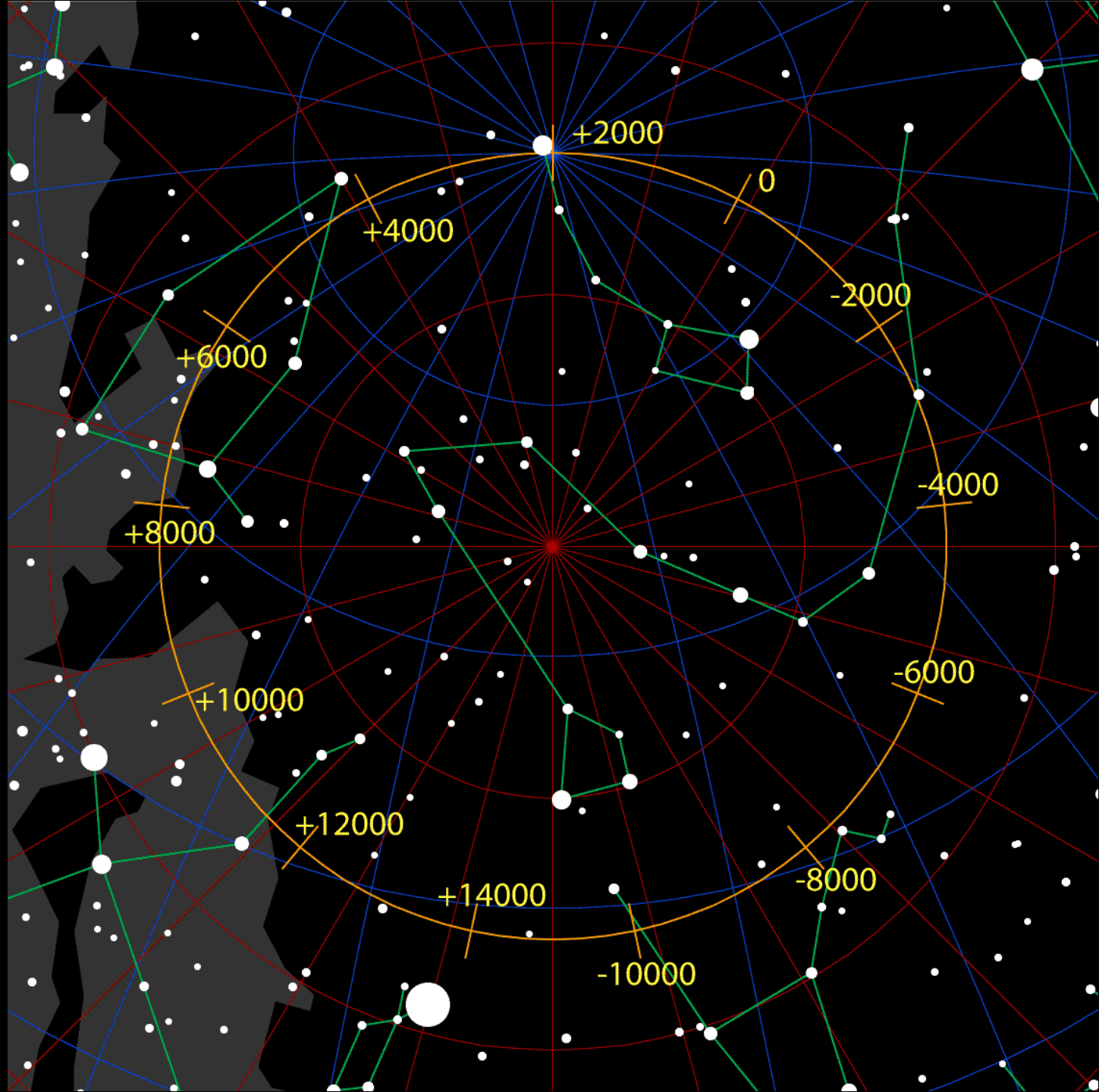


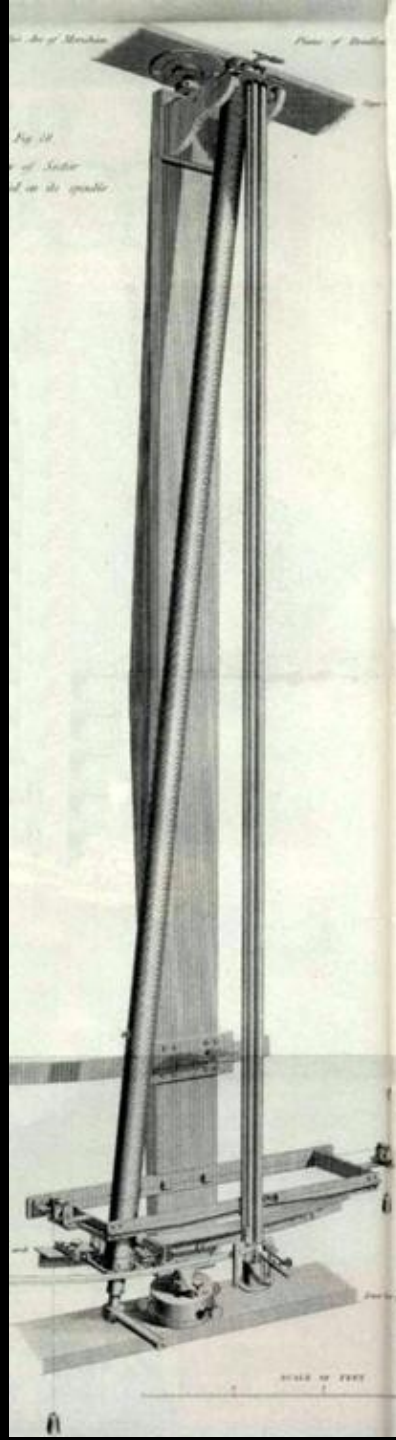


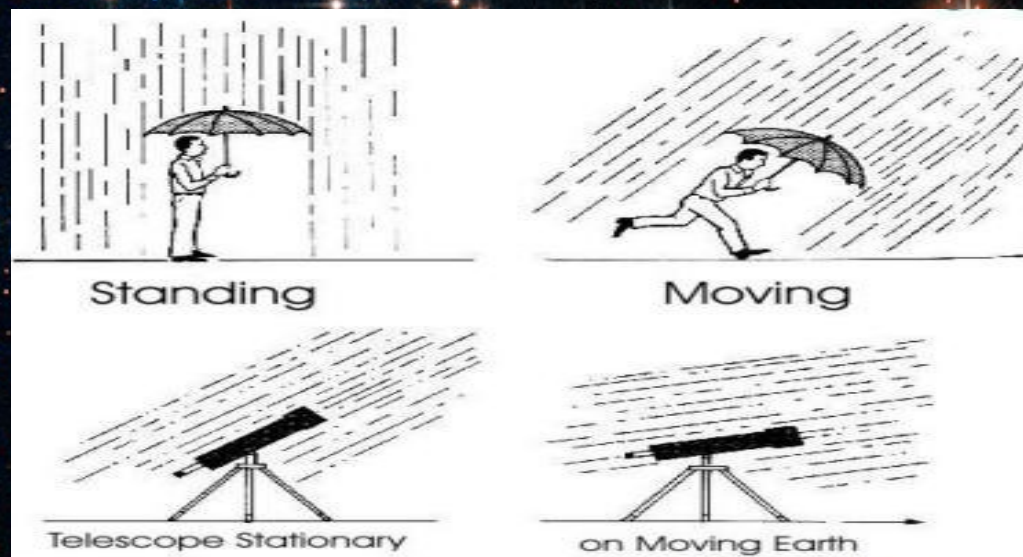
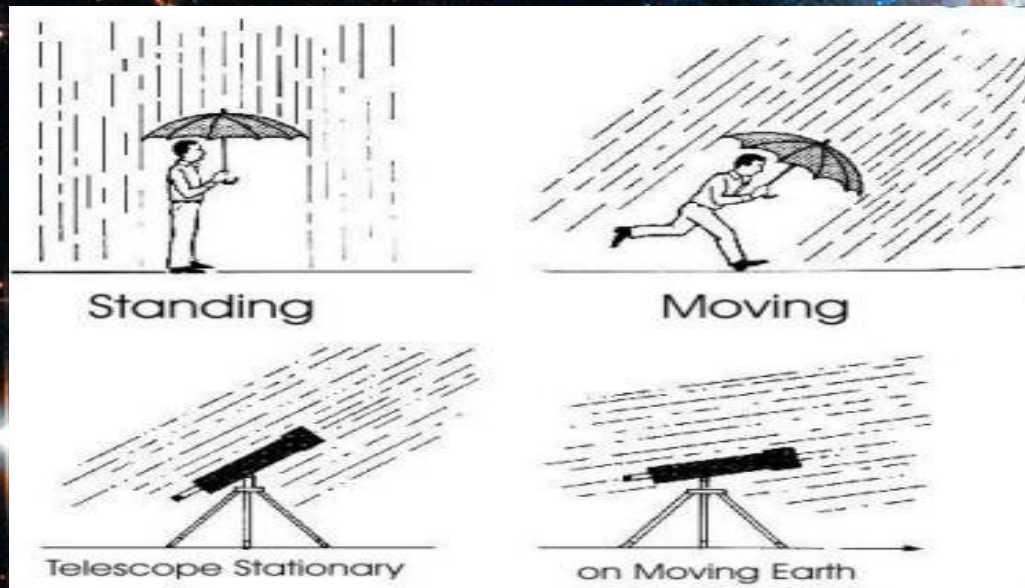


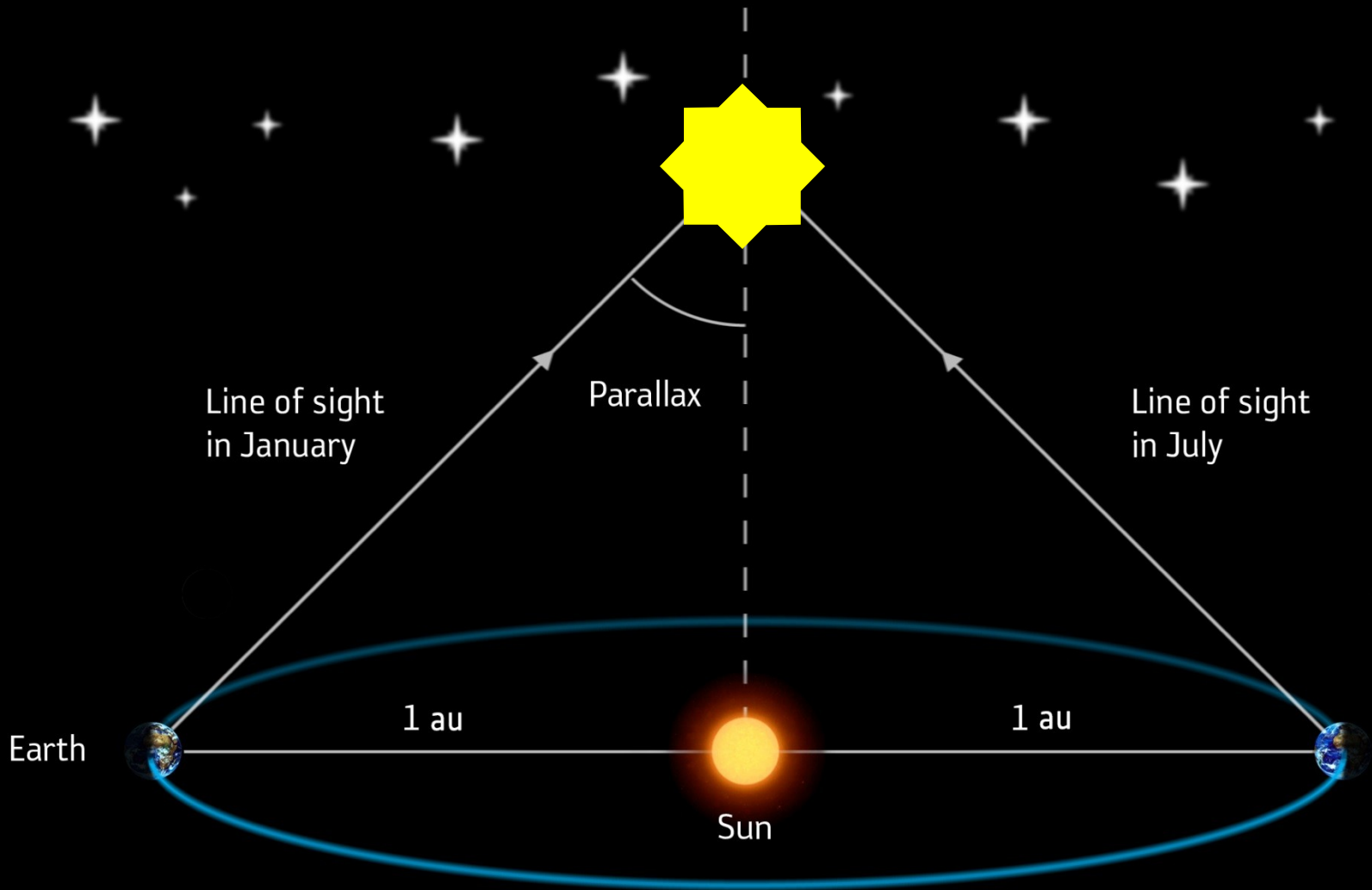




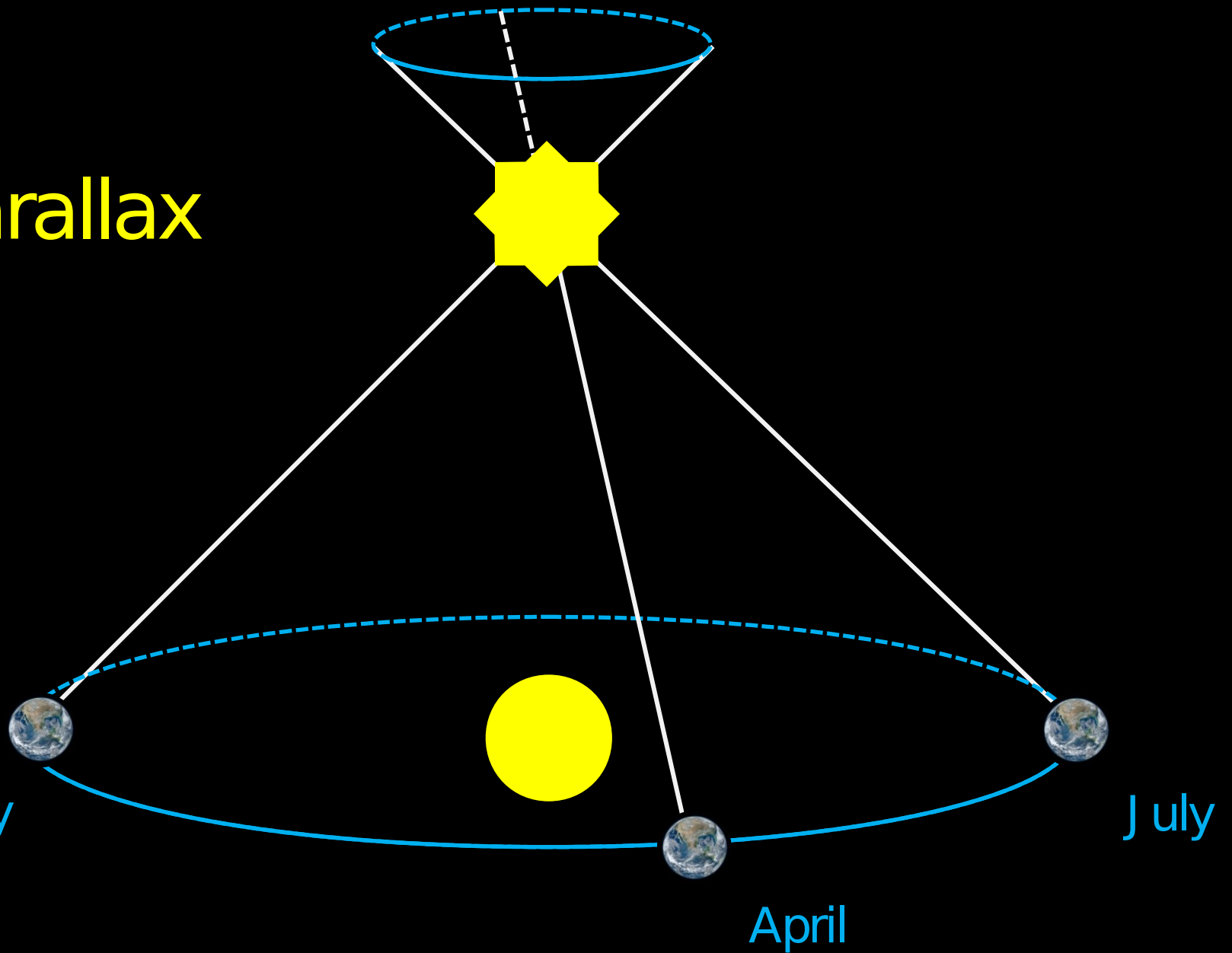




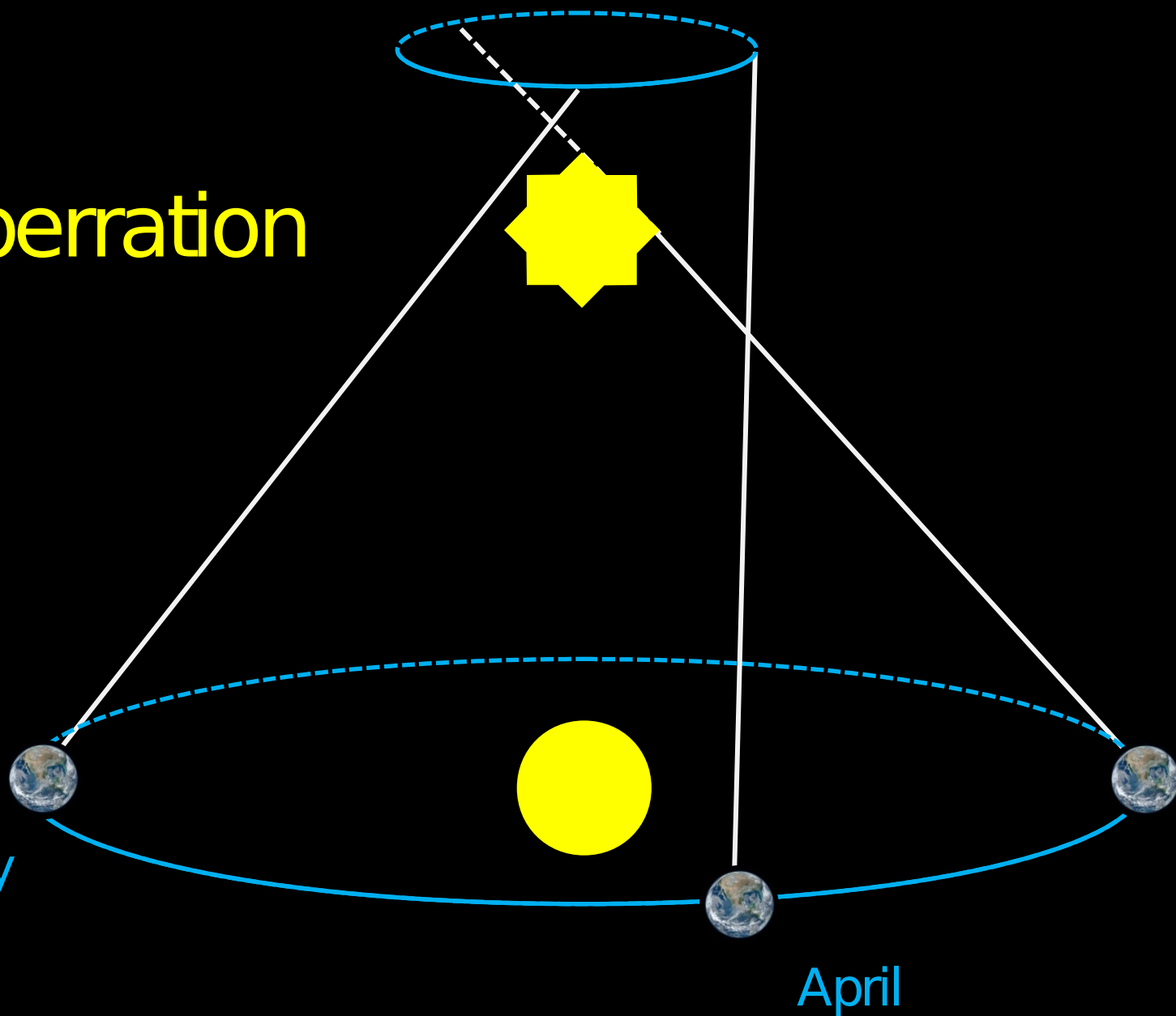




Parallax

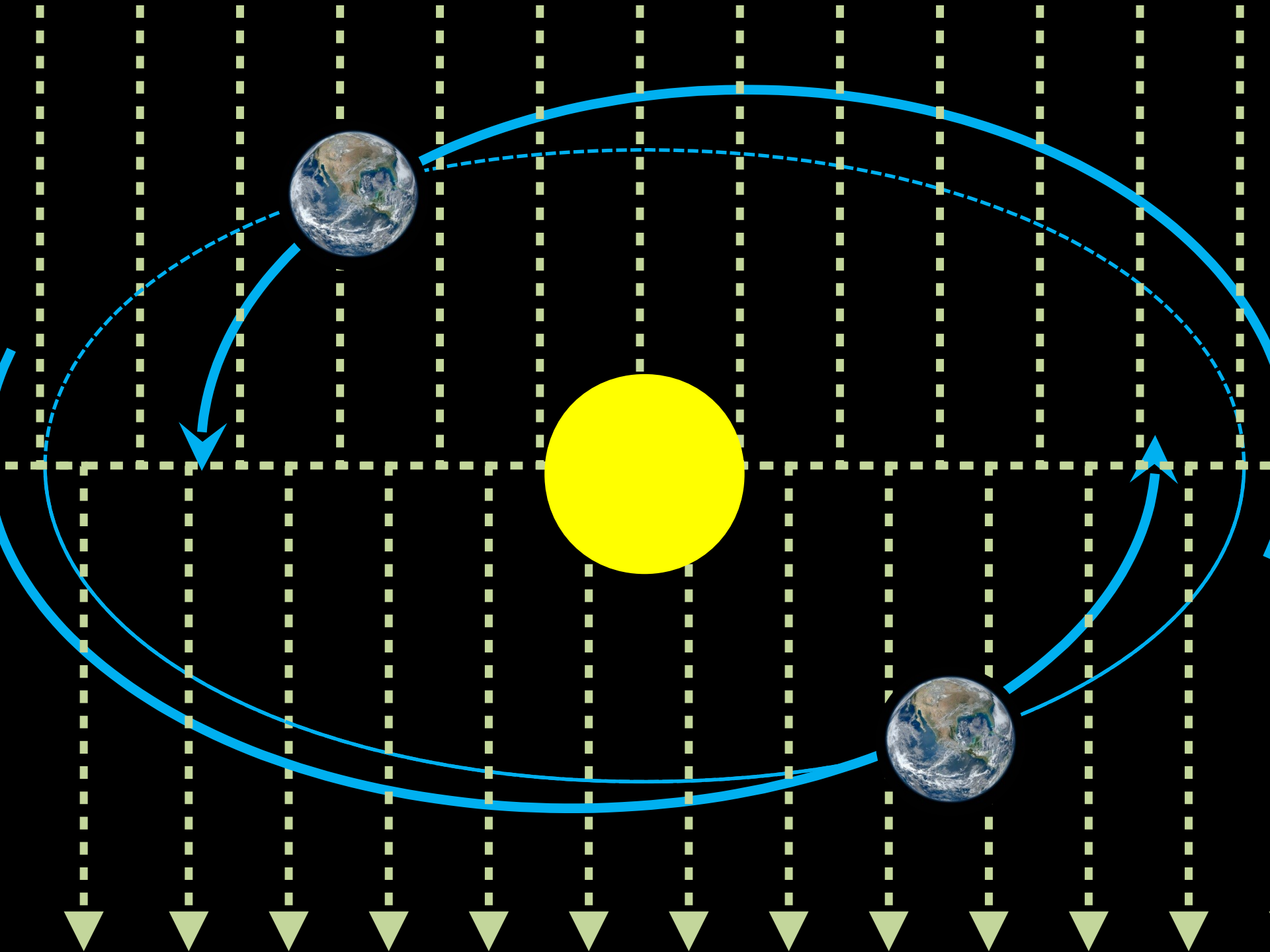


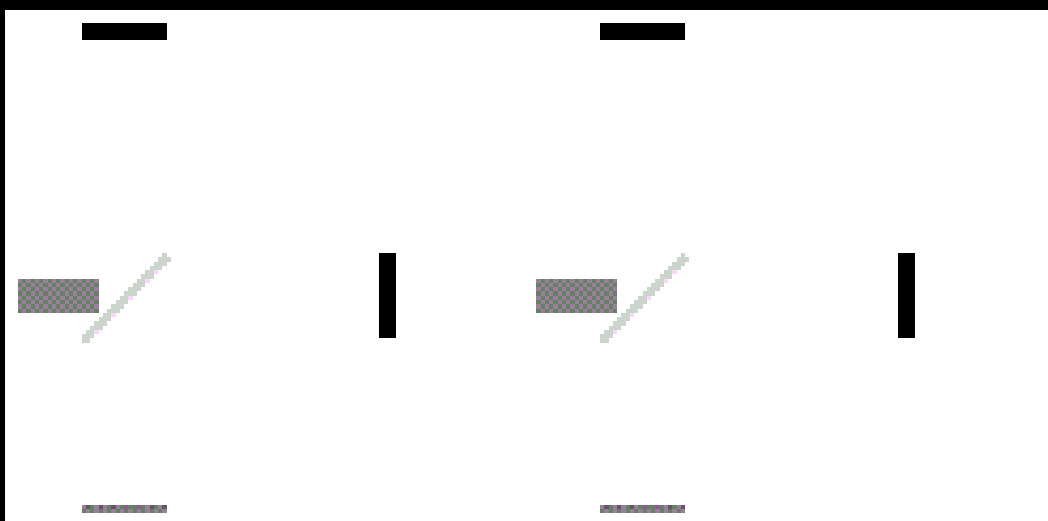
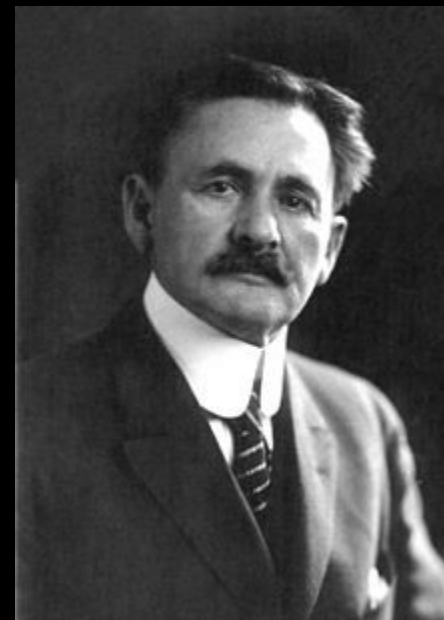
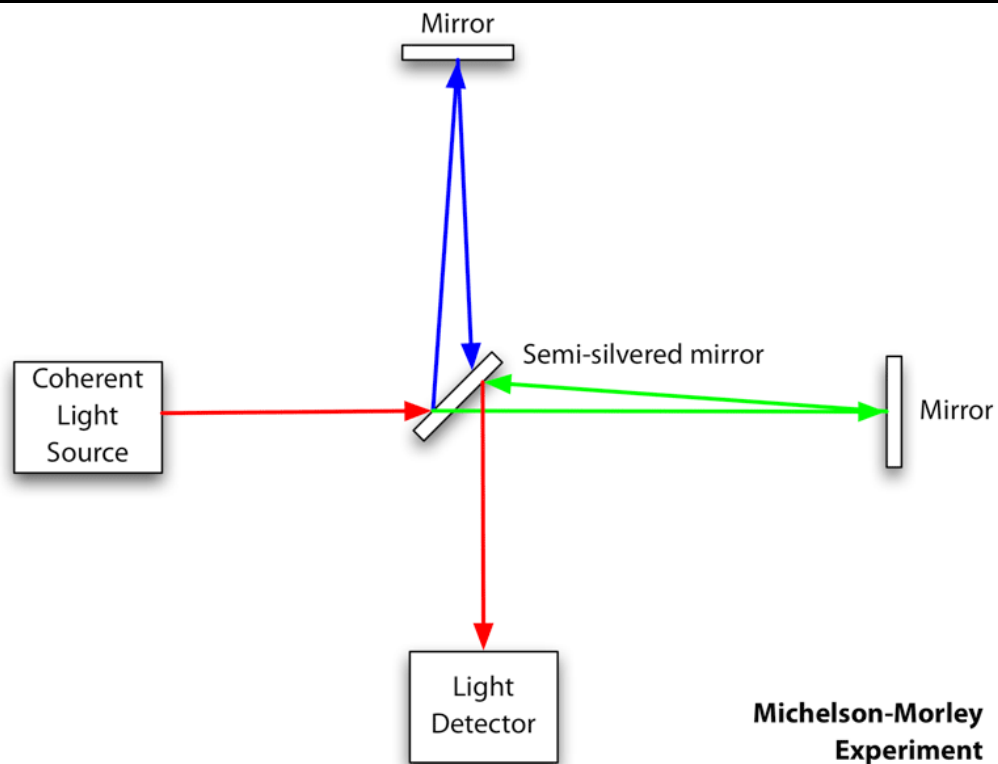
Aberration





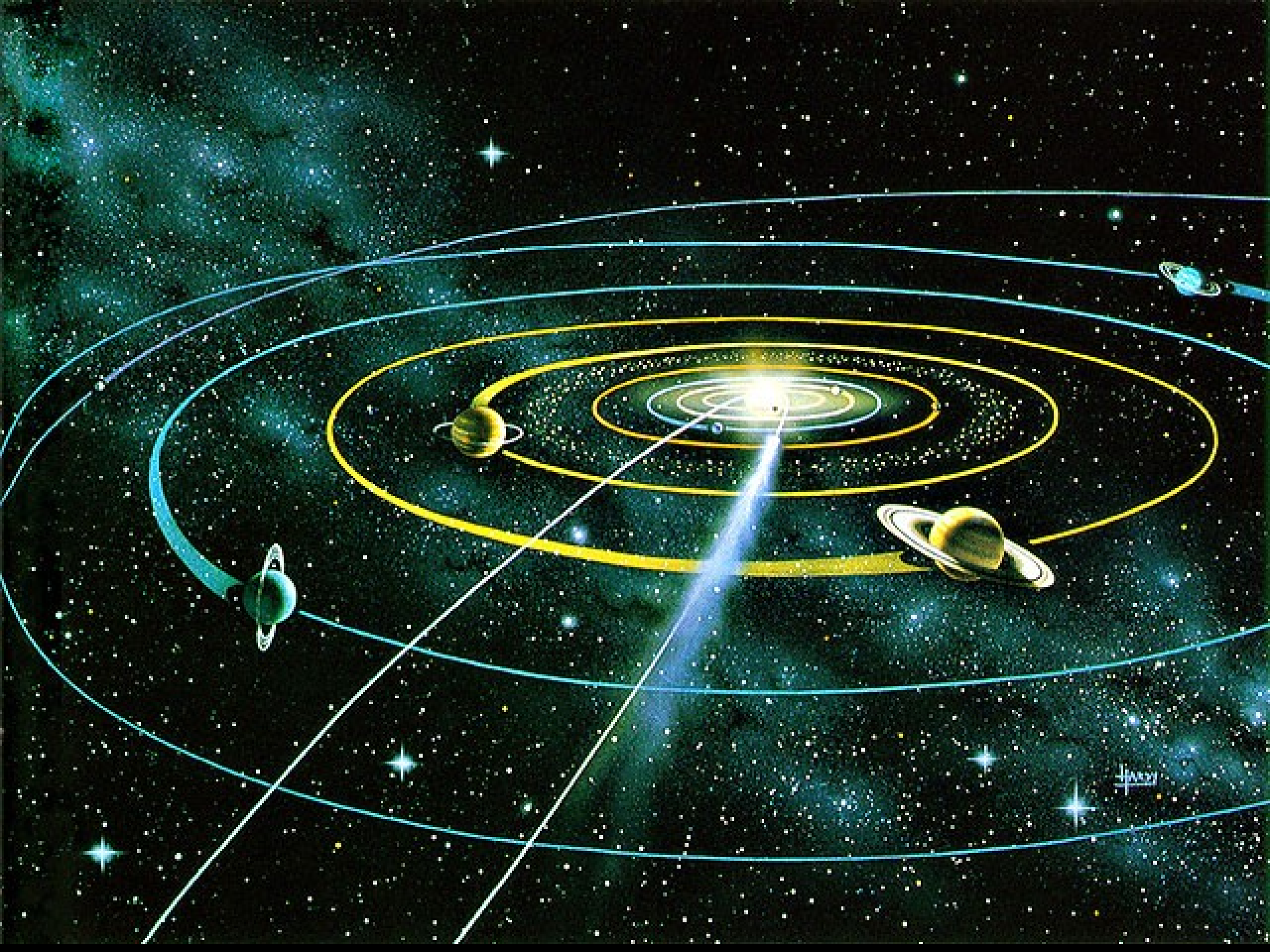
Friedrich Bessel
(1784-1846)







NASA/NOAA/GSFC/Suomi NPP/VIIRS/Norman Kuring



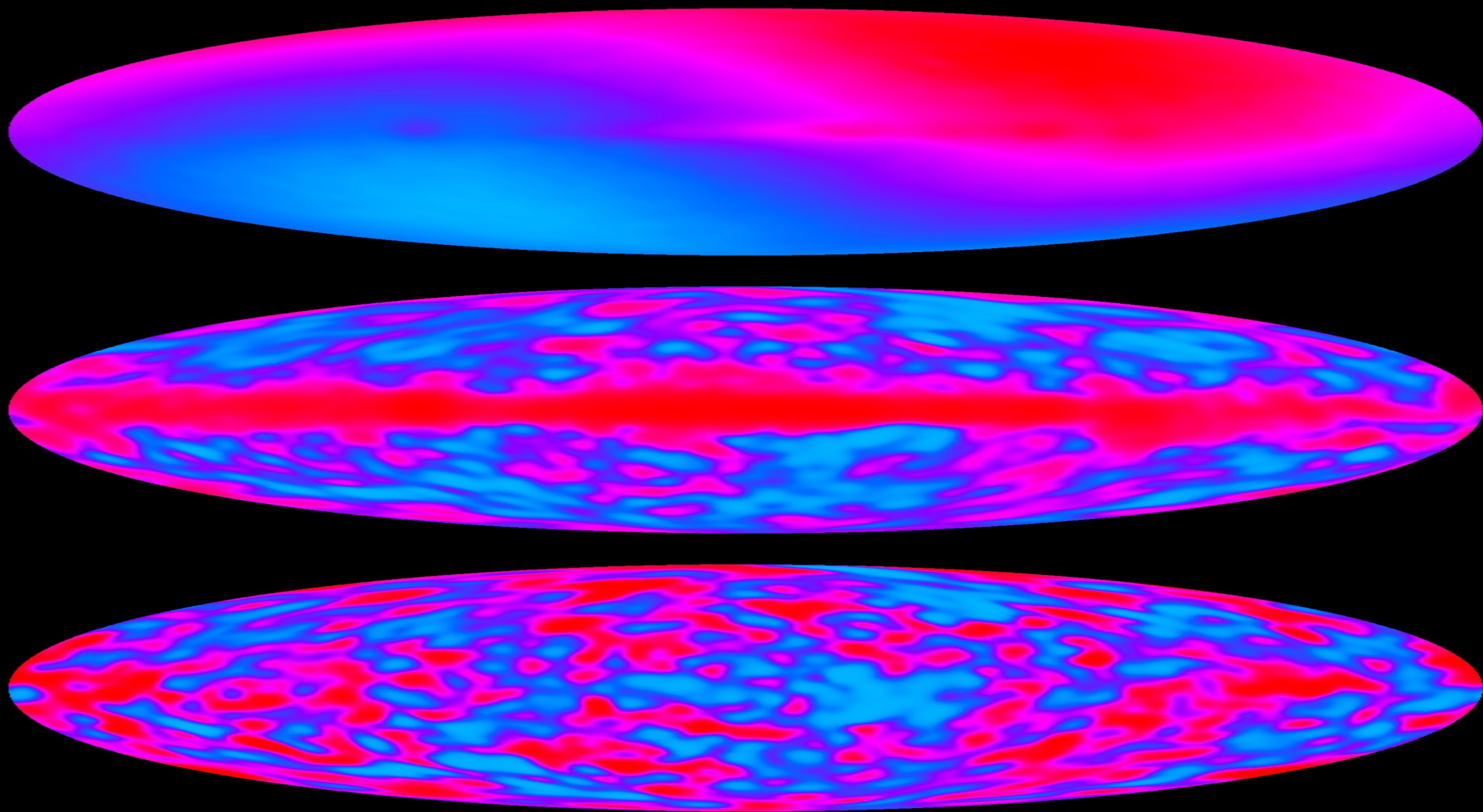


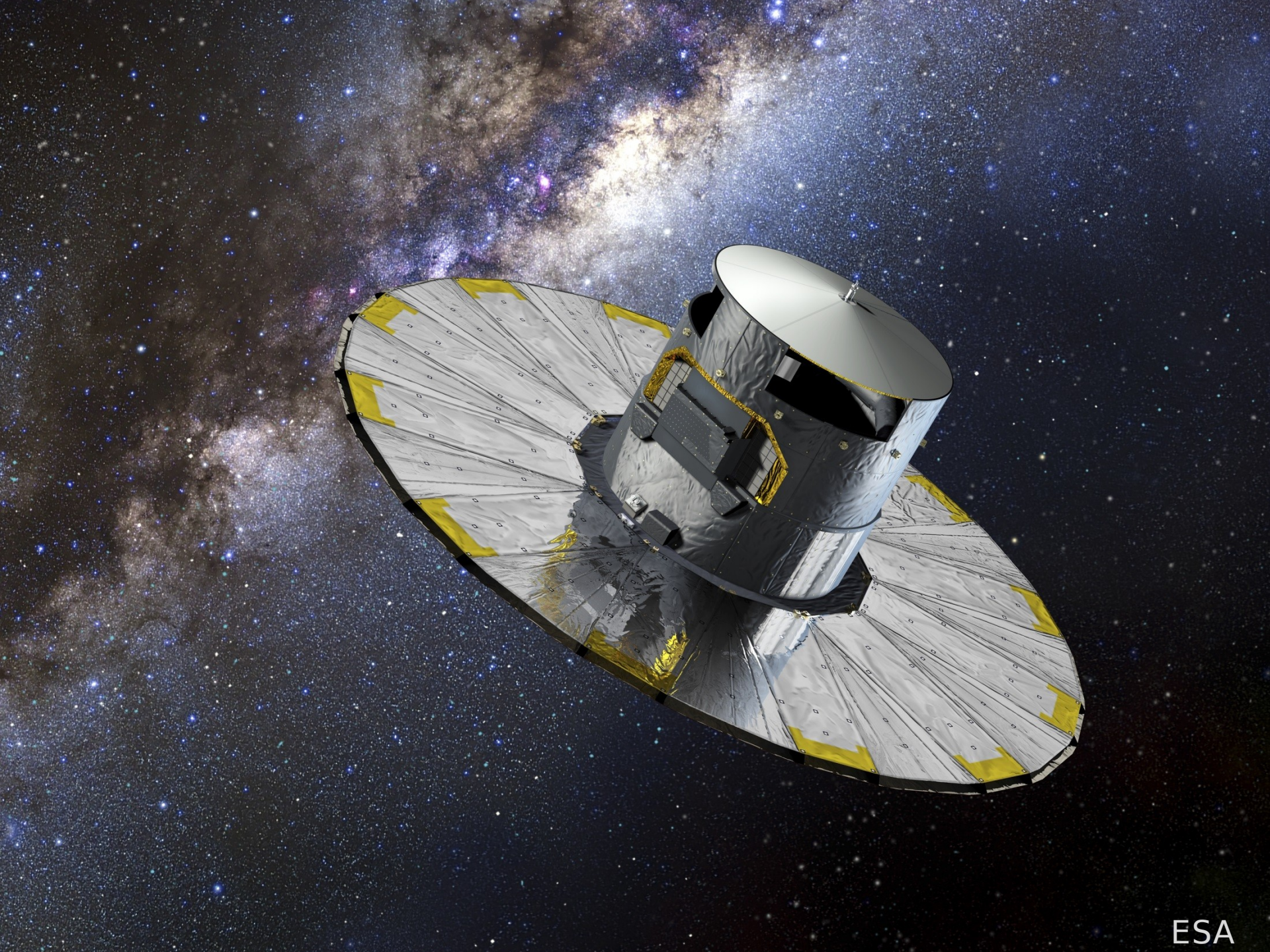
NASA, ESA, CFHT NOAO





NASA, ESA, CFHT NOAO







Wed 24th September
1pm

The Sun, our nearest
star

Wed 22nd October 1pm

The search for dark
matter

Wed 19th November
1pm