

Barry Lawrence Ruderman Antique Maps Inc.

7407 La Jolla Boulevard La Jolla, CA 92037

www.raremaps.com

(858) 551-8500 blr@raremaps.com

Theoriatrium Superiorum Planetarum

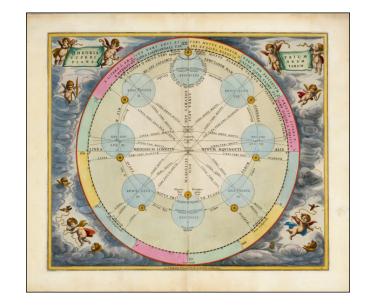
Stock#: 42052 **Map Maker:** Cellarius

Date: 1660 (1708)
Place: Amsterdam
Color: Hand Colored

Condition: VG+

Size: 20×17 inches

Price: SOLD



Description:

Nice example of Cellarius's chart illustrating the Ptolomeic theory of epicycles, an obsolete theory that accounted for variations in the distances between celestial bodies. This chart was engraved by Johannes van Loon for Cellarius's extremely important *Harmonia Macrocosmica*, which has been called the greatest celestial atlas ever published.

The epicyclic theory addressed a problem that arose from the assumption that if the Earth was the center of the universe, then the circuit of the planets should be of a steady one-directional, circular progress. Observation showed, however, that the orbital progress of the planets was in fact irregular, and that, with respect to the stars, the objects would sometimes be stationary.

This plate demonstrates how the epicycles work. During one full rotation around of the epicycle around the earth, the satellite undergoes two orbits of the epicycle. This allows the explanation for both the apogee and the perigee of the orbit--that is, the points where the earth is closest or furthest. This is shown at the top and the bottom of the image.

However, the theory gets yet more complicated. Simple epicycles were insufficient to explain observations. Rather than having the earth at the center of the orbit, the earth is actually at one of the foci of an ellipse. This is labelled A, and the other focus, C, is a fictional point. The center of the epicycle rotates around the ellipse defined by these two points. The sum of the distance from the center of the ellipse to points A and C will remain constant, as shown on the diagram.



Barry Lawrence Ruderman Antique Maps Inc.

7407 La Jolla Boulevard La Jolla, CA 92037

www.raremaps.com

(858) 551-8500 blr@raremaps.com

Theoriatrium Superiorum Planetarum

The outside of the image is decorated with cherubs and clouds, including four holding the title banner.

Detailed Condition: