

2 The Copernican Revolution

- OJTA: 3. The Copernican Revolution/Aristotle and Ptolemy
 - (2) Wanderers on the Celestial Sphere
 - (3) Uniform Circular Motion
 - (4) The Universe of Aristotle
 - (5) The Ptolemaic Universe
 - Epicycle Animator:
<http://csep10.phys.utk.edu/guidry/epicycle/epicycle.html>
- Three fundamental misconceptions:
 - Earth was the center
 - Uniform circular motion
 - Heavenly objects are unchanging (e.g., brightness)

OJTA: 3. The Copernican Revolution/Copernicus

- (1) Sun-Centered Solar System
- (2) Retrograde Motion
- (4) Aristarchus of Samos
- NOTE: *Copernicus retained uniform circular motion*, so he still needed epicycles, though a lot fewer.

OJTA: 3. The Copernican Revolution/Brahe

- (4) Tycho's Supernova
- (5) Tycho's Comet
- (6) Brahe's Observations
- NOTE: *Observations could not yet distinguish Copernican from Ptolemaic.* Only later with Galileo's telescopic observations (phases of Venus)