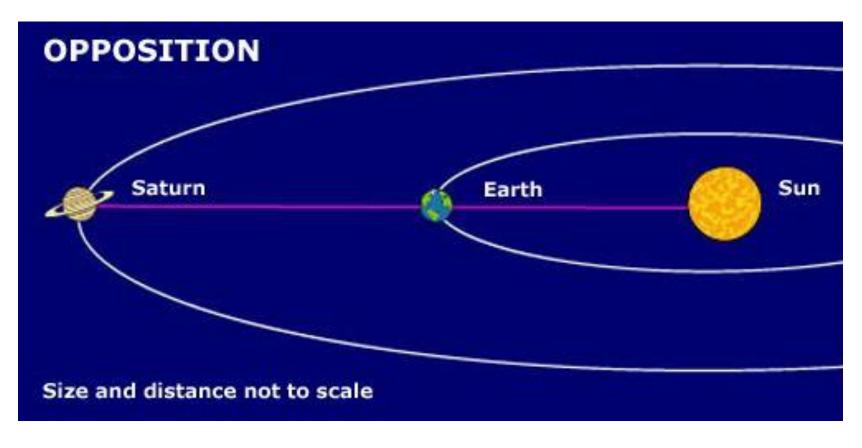
#### **Astronomy Club of Asheville**

# **September 2024 Sky Events**

### **Gas Giant Saturn Closest to Earth this Month**

**The planet Saturn**, our solar system's "lord of the rings", **reaches "opposition"** (opposite the Earth from the Sun and closest for the year) on the night of **Sept. 7/8.** At "opposition" Saturn will be a bright magnitude of +0.6.

Saturn at
"opposition":
opposite the Earth
from the Sun and
closest for the year.



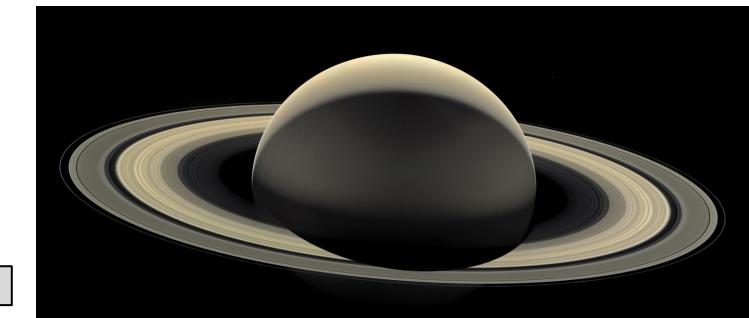
# Astronomy Club of Asheville September 2024 Sky Events

## **Gas Giant Saturn Closest to Earth this Month**

At this opposition, Saturn's ring system will be tipped at a narrowing 4° angle, with its northern hemisphere tilted our way, and its angular size, from one end of the rings to the other, will extend some 43 arc seconds.

Saturn is a fast rotator, with only a 10.7-hour day, but its orbit about the Sun takes 29.46 Earth years. Its disk is about 75,000 miles in diameter, but its icy ring system is some 175,000 miles across, with a maximum thickness of less than 100 meters!

Besides easily observing Saturn's spectacular ring system, modest amateur telescopes typically see up to 6 of Saturn's 146 known moons, including its largest and most famous moon – Titan.



# Astronomy Club of Asheville September 2024 Sky Events

#### **Gas Giant Saturn Closest to Earth this Month**



Located in the zodiac constellation Aquarius, the Water Carrier, Saturn is positioned some 805 million miles (or 72 light minutes) away from Earth at "opposition" on the night of Sept. 7/8.

Rising at dusk in the east, and setting at dawn in the west, the planet Saturn is visible all night during the weeks surrounding this opposition.

Illustration created with SkySafari and PowerPoint software