

Astronomy Is Exciting

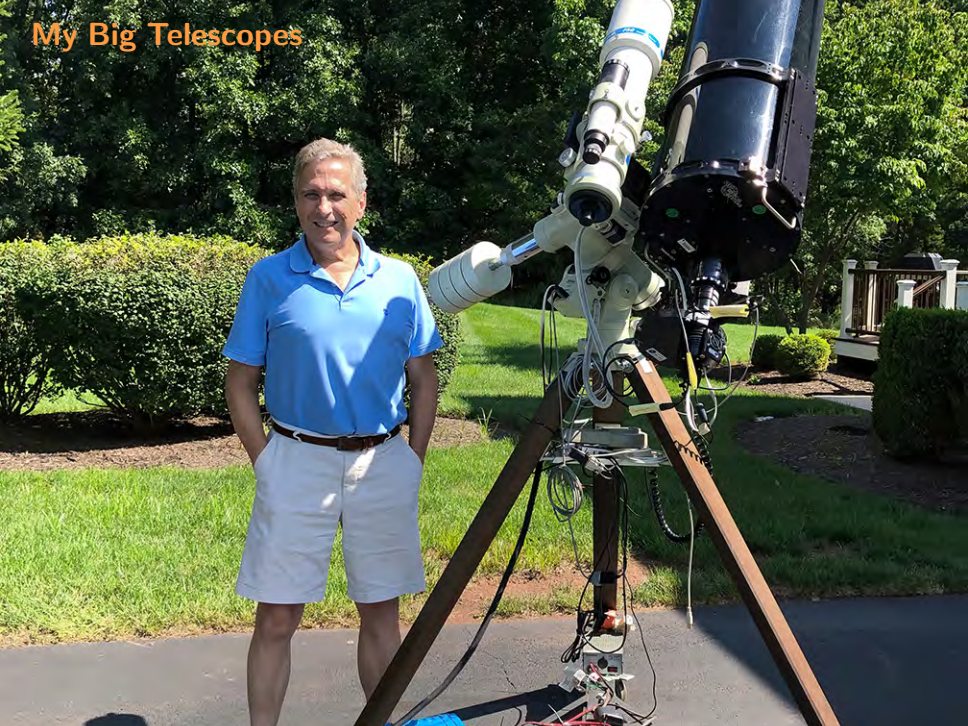
Robert Vanderbei

October 22, 2026

CIEL Senior Living

<https://vanderbei.princeton.edu>

My Big Telescopes



My New Little Telescope



Full Moon



June 14, 2022

Crescent Moon

4:07pm Nov. 5, 2021

Moon Occulted Mars



January 13, 2025

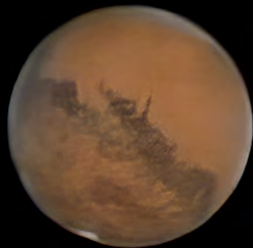
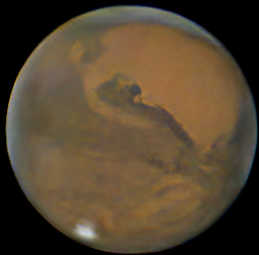
Is The Earth Flat?





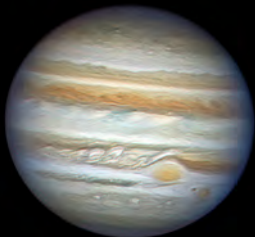
How Aristarchus measured the size of the Moon.

Mars



Oct. 6 and 18, 2020

Jupiter and Saturn



32 and 67 min

Looking Out Beyond Our Solar System

Orion γ

Taurus



Orion



Orion Nebula



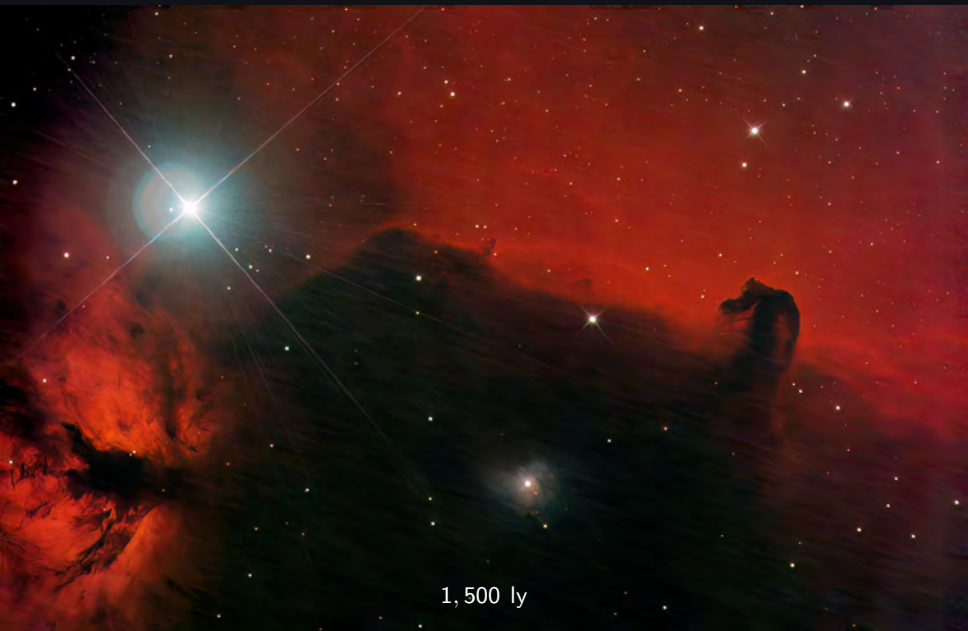
Star Forming Region 1,344 ly

Orion Nebula



Star Forming Region 1,344 ly

Horsehead and Flame Nebulas



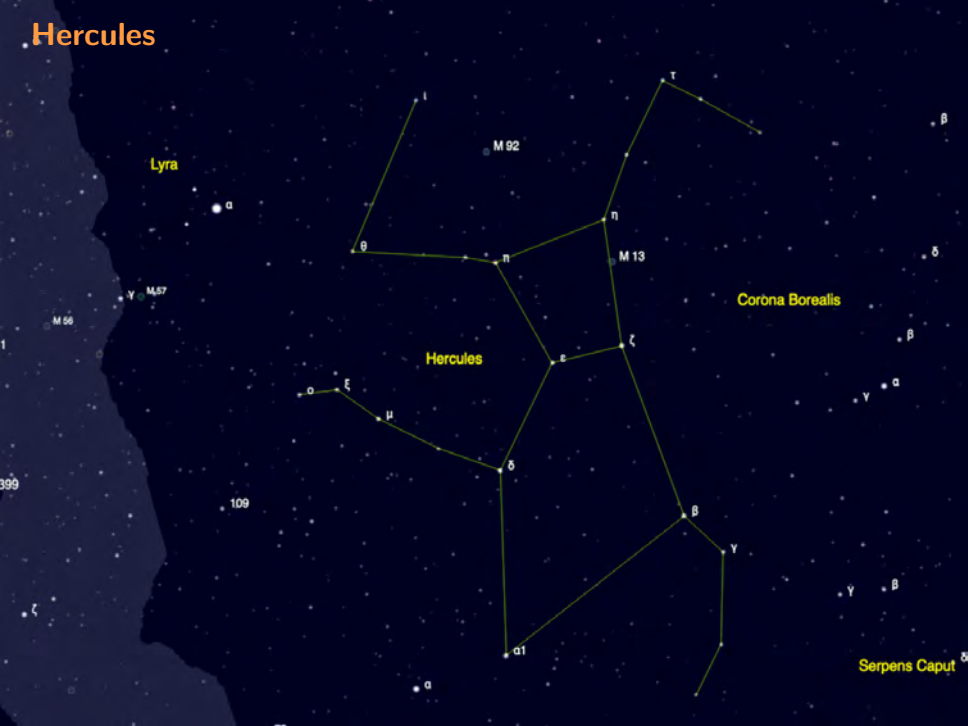
1,500 ly

Horsehead and Flame Nebulas



1,500 ly

Hercules

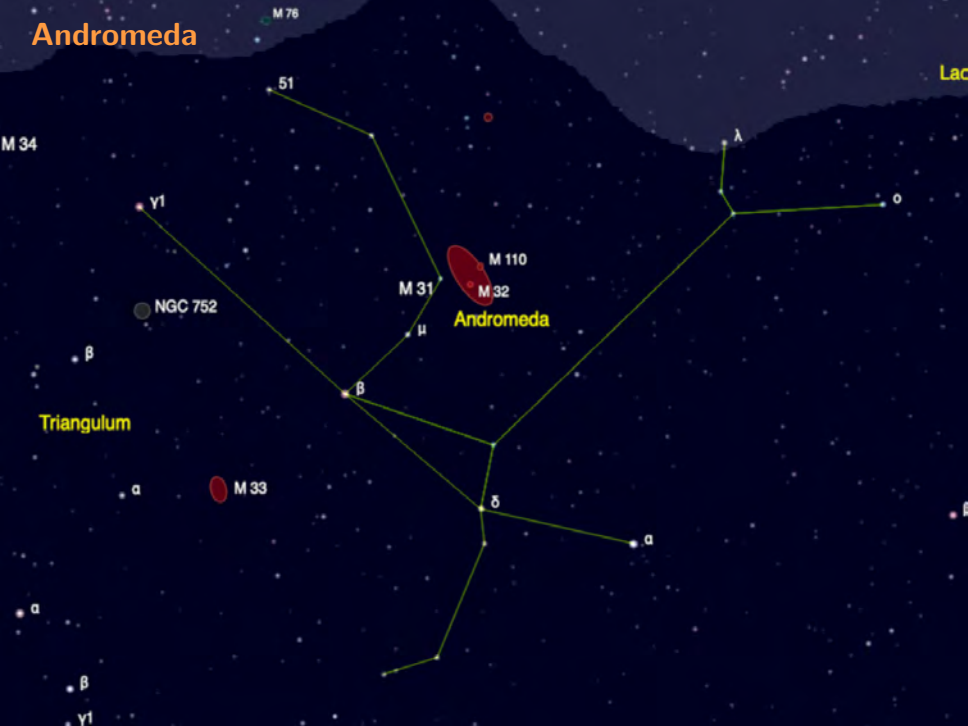


Globular Cluster in Hercules



22,200 ly

Andromeda



The Andromeda Galaxy



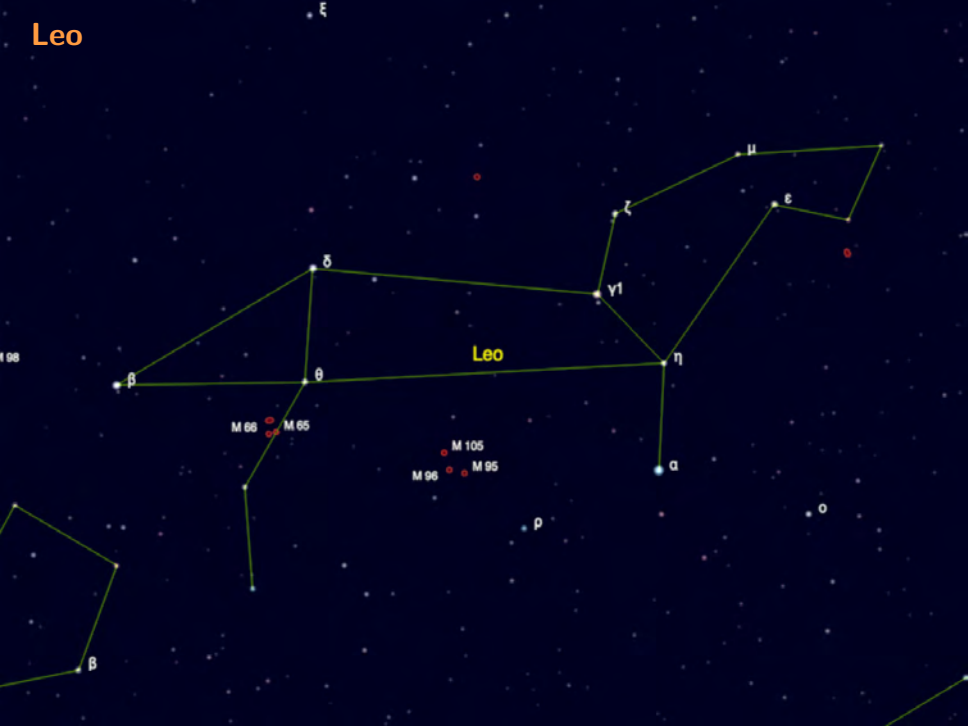
2,450,000 ly

The Andromeda Galaxy



2,450,000 ly

Leo



The Leo Trio



32,000,000 ly

More Photos...

Dumbbell Nebula



Dying Star 1,360 ly

Ring Nebula



2,567 ly

Jellyfish Nebula



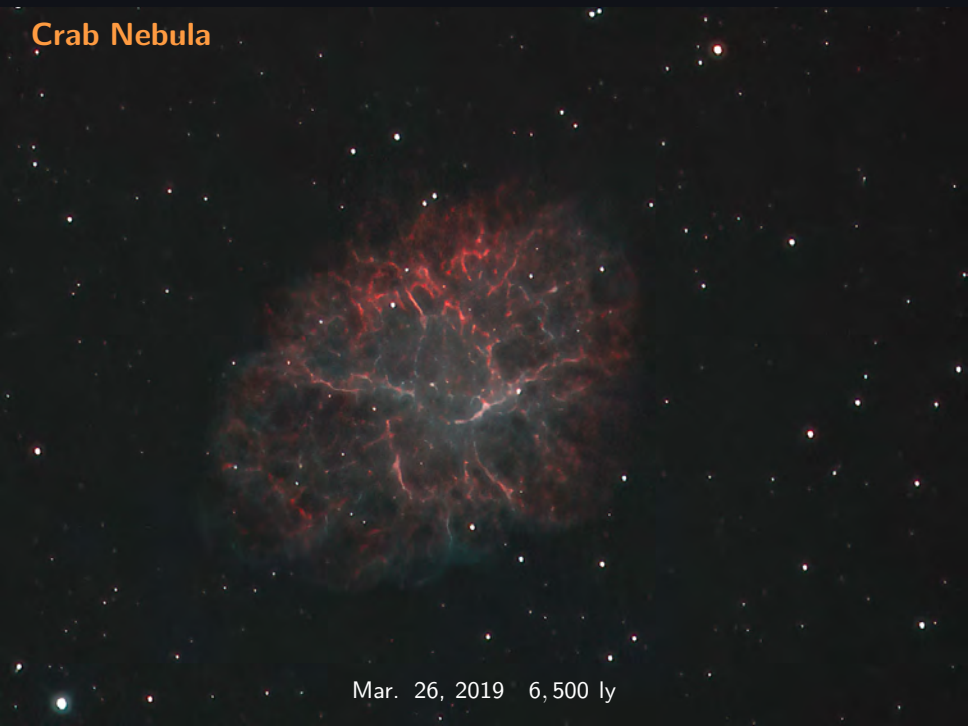
5,000 ly

Eagle Nebula



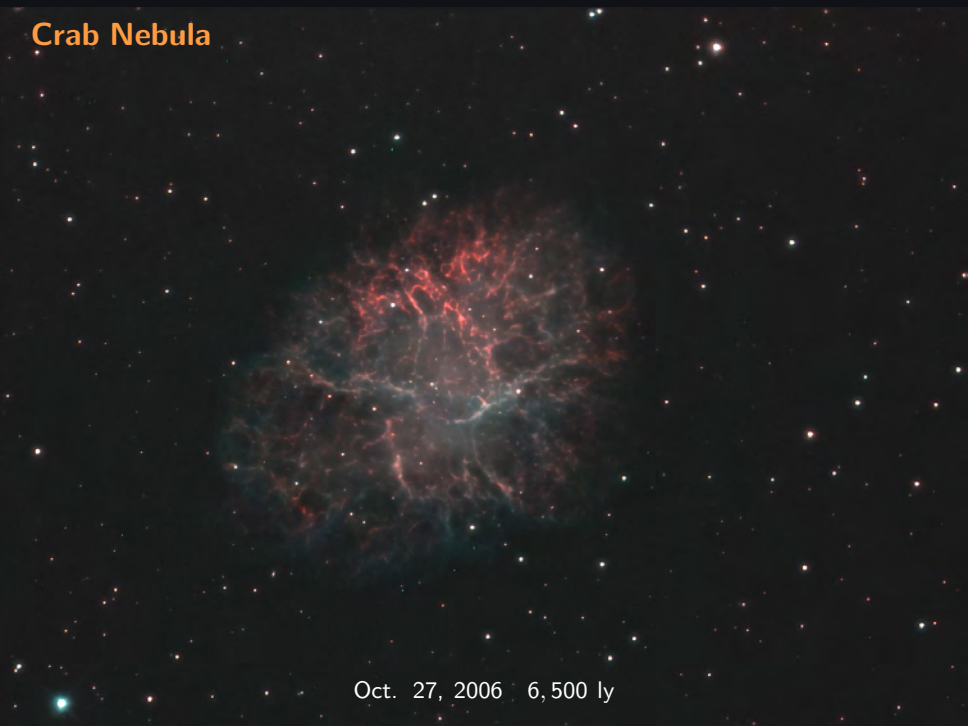
5,700 ly

Crab Nebula



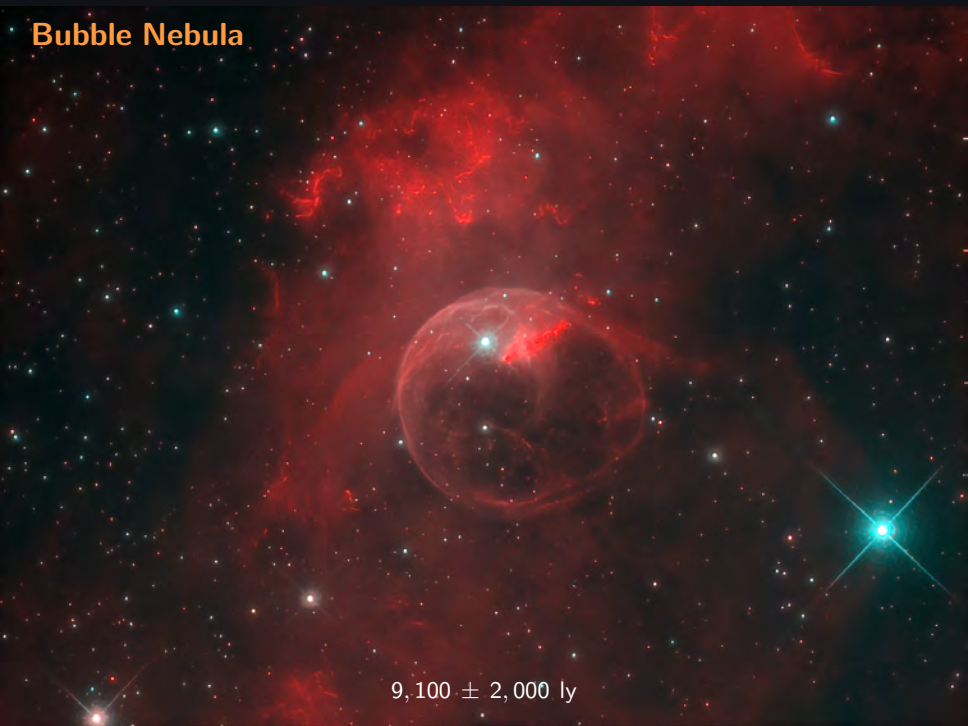
Mar. 26, 2019 6,500 ly

Crab Nebula



Oct. 27, 2006 6,500 ly

Bubble Nebula



$9,100 \pm 2,000$ ly

M81 and M82



12,000,000 ly

The Whirlpool Galaxy

May 9, 2005



31,000,000 ly

The Whirlpool Galaxy

July 10, 2005



31,000,000 ly

The Whirlpool Galaxy

June 7, 2011



31,000,000 ly

Comet 103P / Double Cluster



1.2 min. / 7,460 and 7,640 ly

Some Recent Photos...

Moon Occulting Jupiter – Ingress



4:22am, October 6, 2026

Moon Occulting Jupiter – Egress



5:26am, October 6, 2026

The Pleiades

A deep-sky photograph of the Pleiades star cluster, also known as the Seven Sisters. The image shows a dense group of bright stars, some appearing as distinct points of light and others as soft, glowing clouds. The stars vary in color, with some appearing white or yellow, and others showing hints of orange or red. The background is a dark, deep blue-black, filled with a multitude of smaller, fainter stars, creating a rich, textured appearance. The overall composition is centered, with the cluster's core slightly offset towards the upper right.

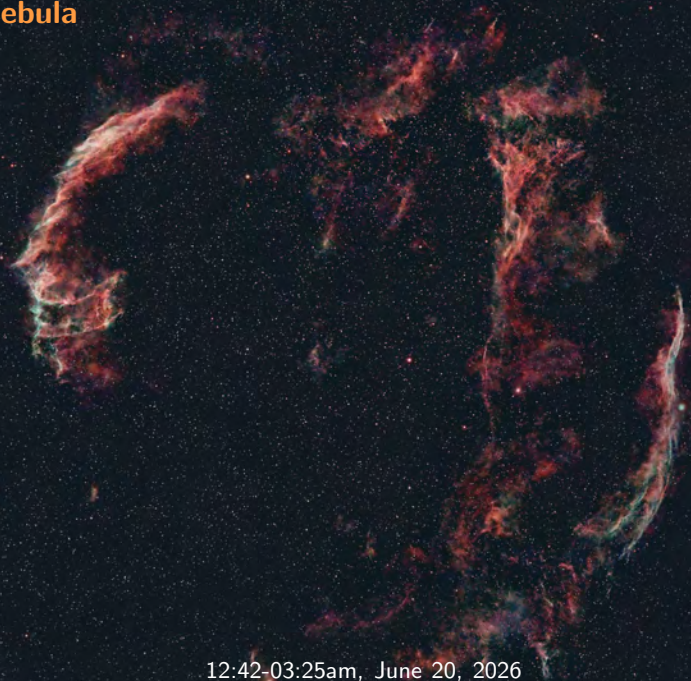
12:08-01:00am, Oct 19, 2026

The Rosette Nebula



20:23-21:33pm, May 9, 2026

Veil Nebula



12:42-03:25am, June 20, 2026

Veil Nebula



12:42-03:25am, June 20, 2026

Heart Nebula



22:22-23:51am, April 27, 2026

Butterfly Nebula



7hrs 50min over two nights: June 5 and 16, 2026

Andromeda Galaxy



7hrs 29min over three nights: Aug 10, Oct 19 and Oct 21, 2026

Triangulum Galaxy



10:30-11:00pm, October 6, 2026

Questions?