

ASTRONOMY NIGHT
AT THE WHITE HOUSE
WITH YOUR NATIONAL OBSERVATORIES
#NSFastronomy
19 OCTOBER 2015



Saturn



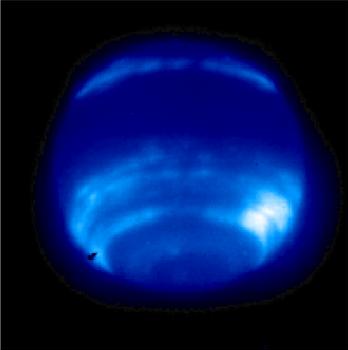
The WHITE HOUSE
ASTRONOMY NIGHT
2015

Double Cluster in Perseus



The WHITE HOUSE
ASTRONOMY NIGHT
2015

Neptune



The WHITE HOUSE
ASTRONOMY NIGHT
2015

The Moon



The WHITE HOUSE
ASTRONOMY NIGHT
2015

M57 Ring Nebula



The WHITE HOUSE
ASTRONOMY NIGHT
2015

Neptune

Neptune is the furthest planet from the Sun in our solar system. NSF-funded researchers investigate Neptune's atmosphere, which is the most active in the solar system, causing tumultuous winds and weather. Did you know Neptune has the strongest winds in the solar system – 2100 km/hour, almost twice the speed of sound?



National Science Foundation

Credit: Center for Adaptive Optics, UC Santa Cruz

M57 Ring Nebula

The Ring Nebula is a spherical shell of glowing gas surrounding a white dwarf star. Although this shell formed just 7,000 years ago – the blink of an eye in astronomical time – it and the white dwarf originated from a dying star billions of years old. Bright planetary nebulae like M57 are easy to view, and NSF-funded astronomers use them to test new astrophysical theories. Did you know a spoonful of white dwarf star material on Earth would weigh as much as an elephant?



National Science Foundation

Credit: C.F. Claver/WITN/NOAO/NSF

The Moon

The Moon is Earth's nearest celestial neighbor, and scientists believe it was created when a Mars-sized rock smashed into Earth during the solar systems formation ~4.5 billion years ago. NSF-funded scientists study moon rocks to uncover what kind of objects may have impacted our own planet. Did you know the Moon is moving away from Earth about 1.5 inches per year?



National Science Foundation

Credit: Karen Pearce using a cellphone camera and telescope adapter

Saturn

Planet Saturn has beautiful rings and is the sixth planet from the Sun. NSF-funded scientists are studying Saturn's intense lightning storms, which are 10,000 times stronger than those on earth. Did you know Saturn is the least dense planet in our solar system? If you were able to place it in a giant tub of water, the planet would float.



National Science Foundation

Credit: Gemini Observatory/AURA/Henry Roe, Lowell Observatory/Emily Scheller, Institute for Astronomy, University of Hawaii

Double Cluster in Perseus

These two star clusters in our Milky Way galaxy were formed nearly simultaneously 13 million years ago. Each cluster has a few thousand stars but together are known as the Double Cluster. NSF-funded astronomers study clusters like these to unravel mysteries about our galaxy. Did you know open star clusters are home to many massive young stars? Those bright orange stars are red giants in the final stages of life.



National Science Foundation

Credit: M.A. Sharp/NOAO/AURA/NSF

TOP 10 AUTUMN TREATS:

- Saturn, Neptune, Moon
- Five stellar groups
- Two galaxies

You are here

Double Cluster

Albireo

Ring

Triangulum

Galaxy: far away...

M13

Does the Milky Way look like the Andromeda Galaxy? If so, here's where you would find the top 10 treats!



National Science Foundation

Credits: (front) background: T.A. Rector/NOAO/AURA/NSF; silhouette: Pete Harendel (NOAO); moon: Adam Block/NOAO/AURA/NSF (back); T.A. Rector and B.A. Wepa/NOAO/AURA/NSF