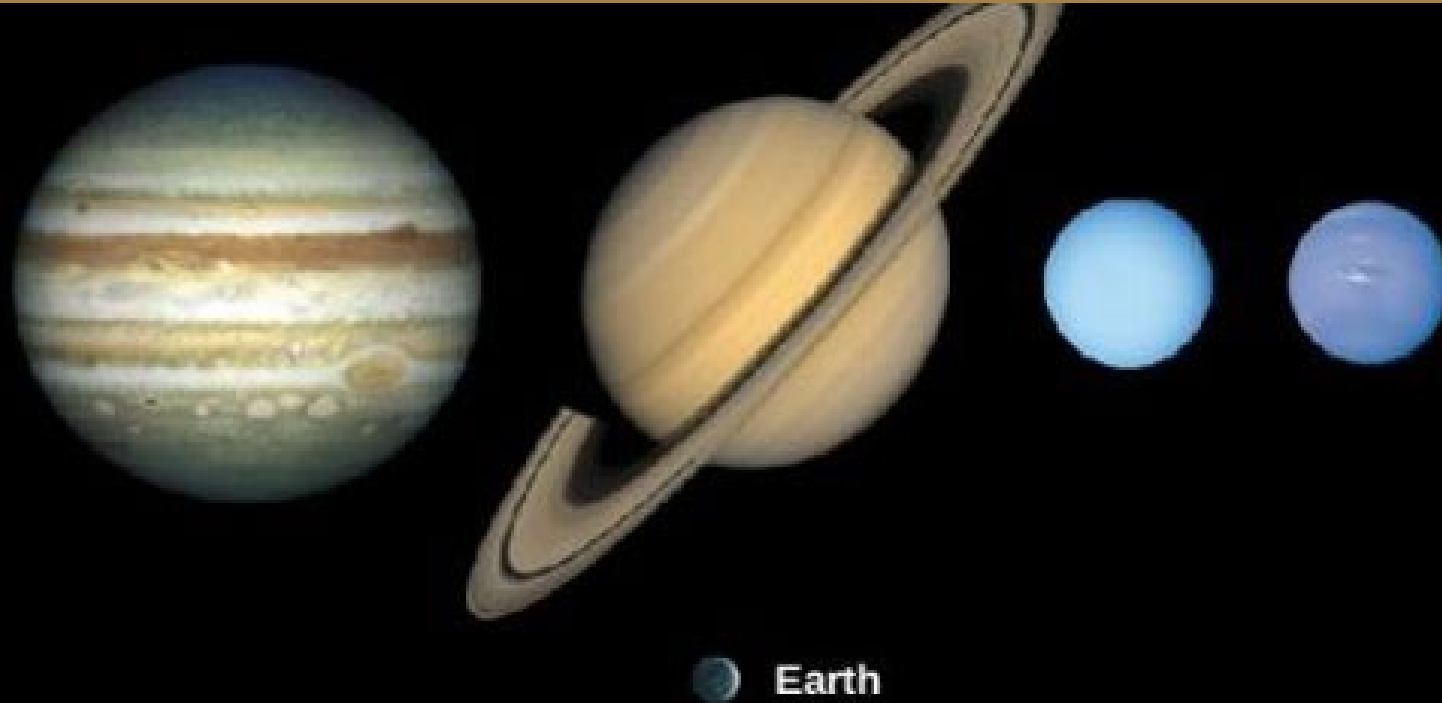


Introduction to the Solar System (part 2)

DR. DAVID YENERALL



Four Giant Planets



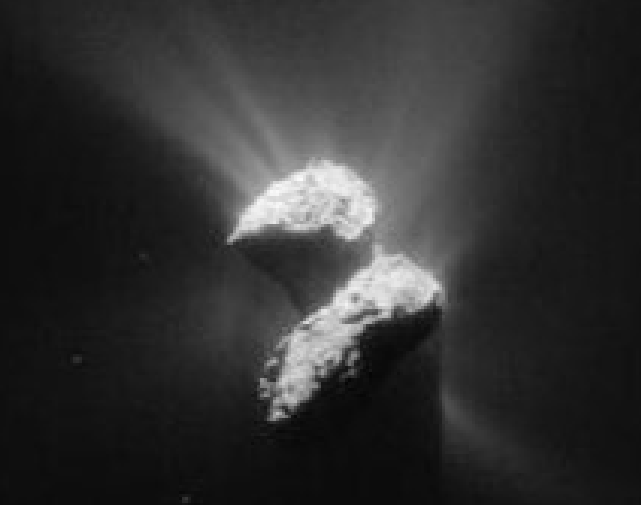
This montage shows the four giant planets: Jupiter, Saturn, Uranus, and Neptune. Below them, Earth is shown to scale. (credit: modification of work by NASA, Solar System Exploration)

Jupiter



This true-color image of Jupiter was taken from the Cassini spacecraft in 2000. (credit: modification of work by NASA/JPL/University of Arizona)

Comet Churyumov-Gerasimenko (67P)



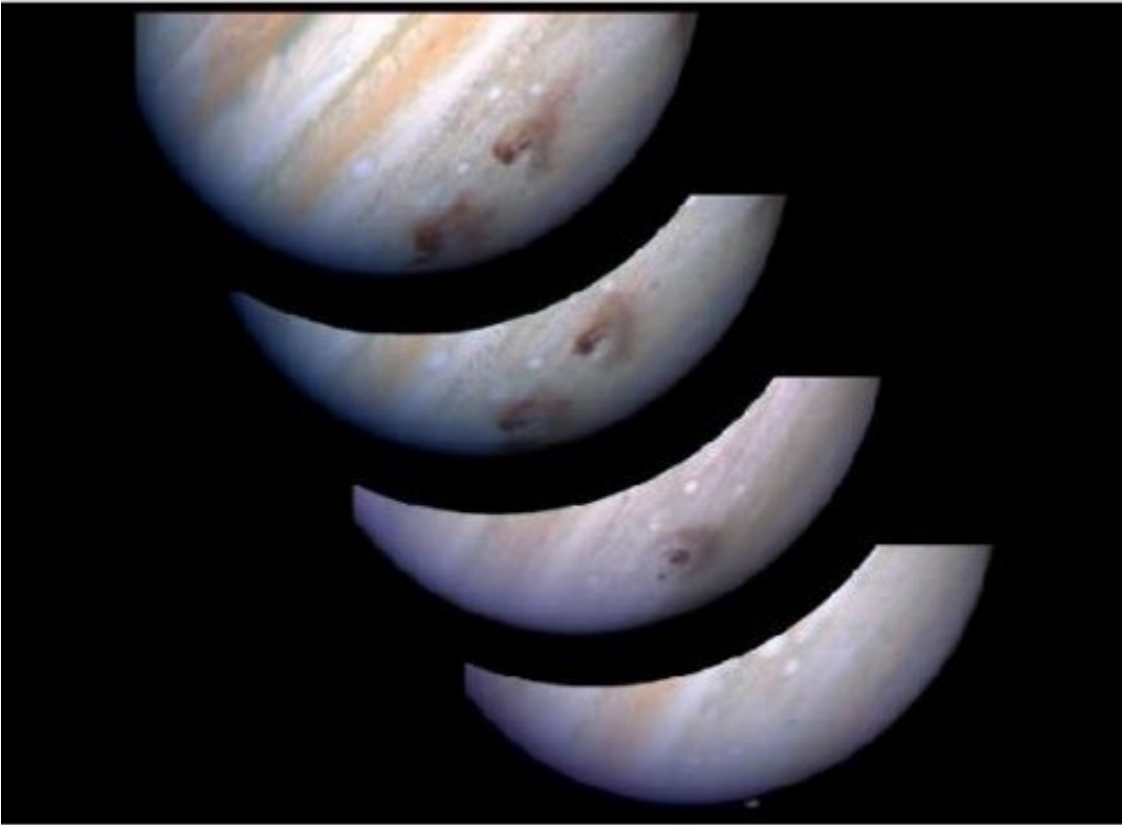
This image shows Comet Churyumov-Gerasimenko, also known as 67P, near its closest approach to the Sun in 2015, as seen from the *Rosetta* spacecraft. Note the jets of gas escaping from the solid surface. (credit: modification of work by ESA/Rosetta/NAVACAM)

Comet Shoemaker-Levy 9



In this image of Comet Shoemaker–Levy 9 taken on May 17, 1994, by NASA's Hubble Space Telescope, you can see about 20 icy fragments into which the comet broke. The comet was approximately 660 million kilometers from Earth, heading on a collision course with Jupiter. (credit: modification of work by NASA, ESA, H. Weaver (STScI), E. Smith (STScI))

Jupiter with Huge Dust Clouds



The Hubble Space Telescope took this sequence of images of Jupiter in summer 1994, when fragments of Comet Shoemaker–Levy 9 collided with the giant planet. Here we see the site hit by fragment G, from five minutes to five days after impact. Several of the dust clouds generated by the collisions became larger than Earth. (credit: modification of work by H. Hammel, NASA)

Ganymede



This view of Jupiter's moon Ganymede was taken in June 1996 by the Galileo spacecraft. The brownish gray color of the surface indicates a dusty mixture of rocky material and ice. The bright spots are places where recent impacts have uncovered fresh ice from underneath. (credit: modification of work by NASA/JPL)

Saturn



This 2007 Cassini image shows Saturn and its complex system of rings, taken from a distance of about 1.2 million kilometers. This natural-color image is a composite of 36 images taken over the course of 2.5 hours. (credit: modification of work by NASA/JPL/Space Science Institute)

Pluto



This intriguing image from the New Horizons spacecraft, taken when it flew by the dwarf planet in July 2015, shows some of its complex surface features. The rounded white area is temporarily being called the Sputnik Plain, after humanity's first spacecraft. (credit: modification of work by NASA/Johns Hopkins University Applied Physics Laboratory/Southwest Research Institute)

Solar Nebula

This artist's conception of the Solar Nebula shows the flattened cloud of gas and dust from which our planetary system formed. Icy and rocky planetesimals (precursors of the planets) can be seen in the foreground. The bright center is where the Sun is forming. (credit: William K. Hartmann, Planetary Science Institute)



Atlas of Planetary Nurseries



These Hubble Space Telescope photos show sections of the Orion Nebula, a relatively close-by region where stars are currently forming. Each image shows an embedded circumstellar disk orbiting a very young star. Seen from different angles, some are energized to glow by the light of a nearby star while others are dark and seen in silhouette against the bright glowing gas of the Orion Nebula. Each is a contemporary analog of our own solar nebula—a location where planets are probably being formed today. (credit: modification of work by NASA/ESA, L. Ricci (ESO))