UNA Planetarium Newsletter

Vol. 4. No. 6 September, 2012

This month those who are interested in space and our attempts to leave earth and explore the cosmos lost Neil Armstrong, who died on September. This spurred a national day of mourning and a lot of thought about the legacy of the *Apollo missions. The Space Shuttles* never seemed to grab the national spotlight the way the space race to the Moon galvanized the public. The studies of the effects of space flight on humans and other creatures, investigations of manufacturing and the launch of satellites is important work, but as the number of missions grew, each one drew less attention. We can to expect we can send people into space and it took disasters like the Challenger and Columbia missions to remind us that every launch and every mission is a risk.

The thing that was to really be admired was Neil Armstrong's modesty. He was proud of his accomplishments, but he was the first to tell people that he was at the top of a rocket through the efforts of several hundred thousand scientists and engineers who designed and built the spacecraft. It was a national effort that everyone got behind and he would say that everyone did it, not just him. These days' so-called heroes need constant worship and adulation. The modesty of Neil Armstrong stands in stark contrast.

UNA Planetarium and Observatory, is operated by the Dept. of Physics and Earth Science

Image of the Month



This Hubble Space Telescope image shows two colliding star clusters called 30 Doradus, which is 170000 light years away. The two clusters seem to be evidence that the large clouds of gas and dust that form stars fragment and then form star clusters. This idea had been around for a while but this is the first time it has been caught in the act. Image courtesy NASA.

Astro Quote: "This dead of midnight is the noon of thought, And Wisdom mounts her zenith with the stars."

Anna Barbauld, Summer's Evening Meditation.

September tours start at 8:00PM on Tuesdays. Tours consist of a "Stars Tonight" constellation discussion and a multimedia presentation. If weather allows we then observe using the UNA observatory's telescope. Tours are intended for a general audience. \$3/person.

Upcoming Events

Sept. 18th. Planetarium public night

Sept. 22th. Observe the Moon Night

August 25th. Planetarium public night

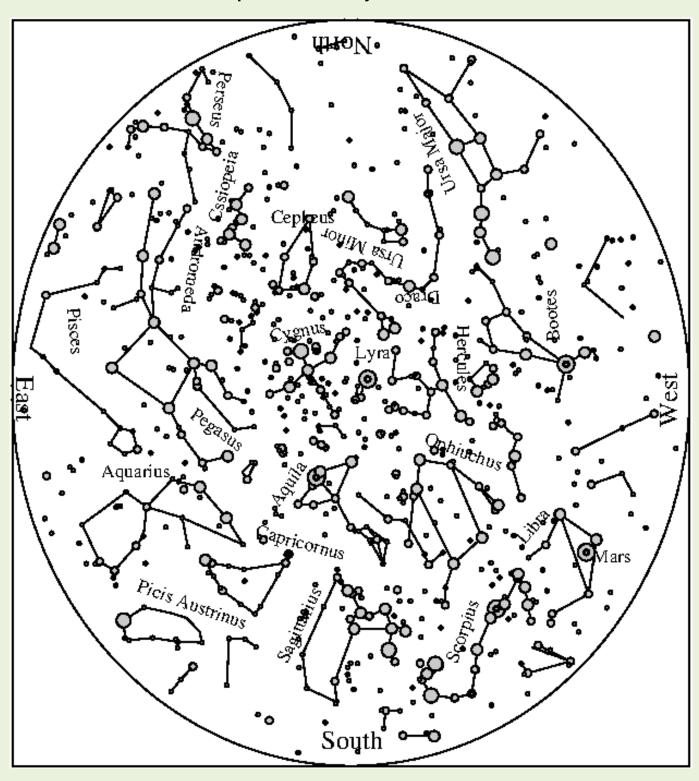
August 27th. Shoals Astronomy Club meeting

October 2nd. Planetarium public night

Observing Highlights

Jupiter appears in the morning sky before midnight in Taurus.

The September 2012 Sky for North Alabama



How to use this Chart: The sky is shown for 8:00PM, September 20th for Florence, Alabama. It will appear this way one hour earlier for each week difference in time. The stars brightness's are represented by different sized dots. The faintest stars you can see are the small dots; the brightest ones are large dots. Hold the chart with the direction you are facing down. So if you are facing north, hold the chart with north down. The circle represents the horizon and the center of the chart the point directly over your head. So an object half-way between the center and edge of the chart is half-way up in the sky. This chart was prepared using the SkyNow software of R. M. Blake. This chart may be reproduced for non-commercial purposes with the following acknowledgement included: Courtesy UNA Planetarium and Observatory. https://www.una.edu/planetarium/.

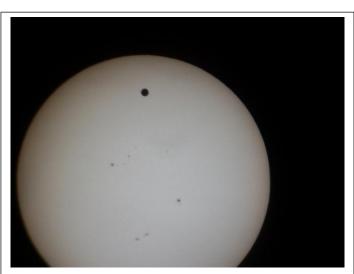
Events

Venus Transit

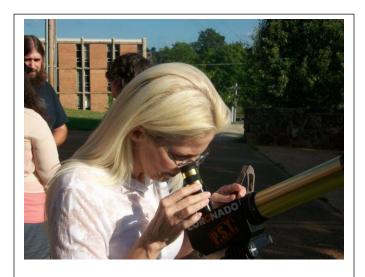
UNA Planetarium held a special public observing session for the transit of Venus in July. We had over 100 people attend, using specially equipped telescopes and solar eclipse glasses to view the event. It will be the last one this century. Many thanks go to the Shoals Astronomy Club and Society of Physics Students for helping with everything.



Volunteer Scott Aldridge operates a telescope.



The Transit. Venus is the dark circle top-center.



Observing the transit.



The crowd! Many people came and went.



Observe the Moon Night

UNA Planetarium will be participating in International Observe the Moon Night on September 22nd. We will start at 7:30PM with an interactive program discussing meteorite impacts and craters. We will then observe the Moon, weather permitting, using UNA's telescopes. Visitors will be given the opportunity to take a photo of the Moon using their IPhone, Quickpix-style camera or smartphone. The program is free and is intended for all ages.

Cassini Mission Essay Contest

The Cassini spacecraft launched in October 1997 and has been orbiting Saturn since 2004. To celebrate the mission, they are holding an essay contest.

The essay contest is open to students in grades 5-12. Essays must be under 500 words. There are three essay topics to choose from:

- 1. Saturn's small shepherd moon, Pan
- 2. Saturn's F Ring
- 3. Saturn

For contest rules, videos about each essay topic, a downloadable contest flyer, frequently asked questions, and more information, visit:

http://saturn.jpl.nasa.gov/scientistforaday/

The contest deadline is Wednesday, October 24, 2012. All essays must be submitted by the student's teacher. If the essay contest is used as a class assignment, please send the top 3 essays from each class, along with a list of other students who wrote essays for the contest.

Name an Asteroid

NASA plans to launch the Origins-Spectral Interpretation-Resource identification-Security-Regolith Explorer (OSIRIS-REx) mission in 2016. The mission will attempt to return samples of the asteroid (101955) 1999 RQ36 which is a primitive asteroid that may contain organic compounds. Such samples are important in understanding the origin of life on Earth. Due its rather cumbersome name, NSA wants a better one. You can help. The competition is open to students under age 18 from anywhere in the world. Each contestant can submit one name, up to 16 characters long. Entries must include a short explanation and rationale for the name. Submissions must be made by an adult on behalf of the student. The asteroid was discovered in 1999 by the Lincoln Near Earth Asteroid Research (LINEAR) survey at MIT's Lincoln Laboratory. LINEAR is part of NASA's Near Earth Observation Program in Washington, which detects and catalogs near-Earth asteroids and comets. The asteroid has an average diameter of approximately one-third of a mile (500 meters).

To review contest rules and guidelines, visit: http://planetary.org/name

To see a video explanation about the contest, visit: http://www.nasa.gov/topics/solarsystem/features/name-asteroid.html

For information about the OSIRIS-REx mission, visit: http://osiris-rex.lpl.arizona.edu