

UNA Planetarium Newsletter

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2009

Writing this on my birthday, I am of course a bit circumspect. I am constantly reminded as an astronomer that time and the change that comes with it is an ever increasing quantity that allows us the opportunity to witness unimaginable events. When we look at the stars, nebulae and galaxies, we see the results of many chance events. The nuclear reactions in the cores of stars that allow them to shine are in fact improbable. It is only by the accumulated effects of millions of attempted collisions do enough succeed to fuse hydrogen into helium and liberate the energy that allows a star to shine. It then takes about a million years for the light to get to the surface of the star, and then years for the light to reach your eye. The night sky is the ultimate masterwork of pure, raw statistics manifested in light.

The very fact that the sky is dark reminds us of the limited age of the Universe. If the Universe were infinite and eternal, then the entire sky would be illuminated by the light of distant Suns in all directions. We would not see them as individuals, blinded as we would then be. So it is good that the stars and Universe are not infinite and come and go as they do. I was once asked if I would like to freeze time. My reaction is that if you froze time, then the stars would not shine, and who would want that? Mel Blake.

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

Image of the Month



The space shuttle will be doing its final servicing mission for the Hubble space telescope this week. While there, the Wide Field Planetary Camera 2 (WFPC2) will be replaced. This is Hubble's longest serving camera and has taken many of Hubble's most famous images. This image will be the camera's last. It shows the planetary nebula K 4-55, which is 4600 light-years away in Cygnus. Planetary nebulae have nothing to do with planets. When stars like the Sun reach the final stages of their lives, the core collapses into a white dwarf, a hot dense core that cools for billions of years; the rest of the star's gas is blown off into space, where it glows as a nebula. **Image courtesy NASA.**

Astro Quote: Mortal as I am, I know that I am born for a day. But when I follow at my pleasure the serried multitude of the stars in their circular course, my feet no longer touch the earth.

- Ptolemy, c.150 AD

Observing Highlights

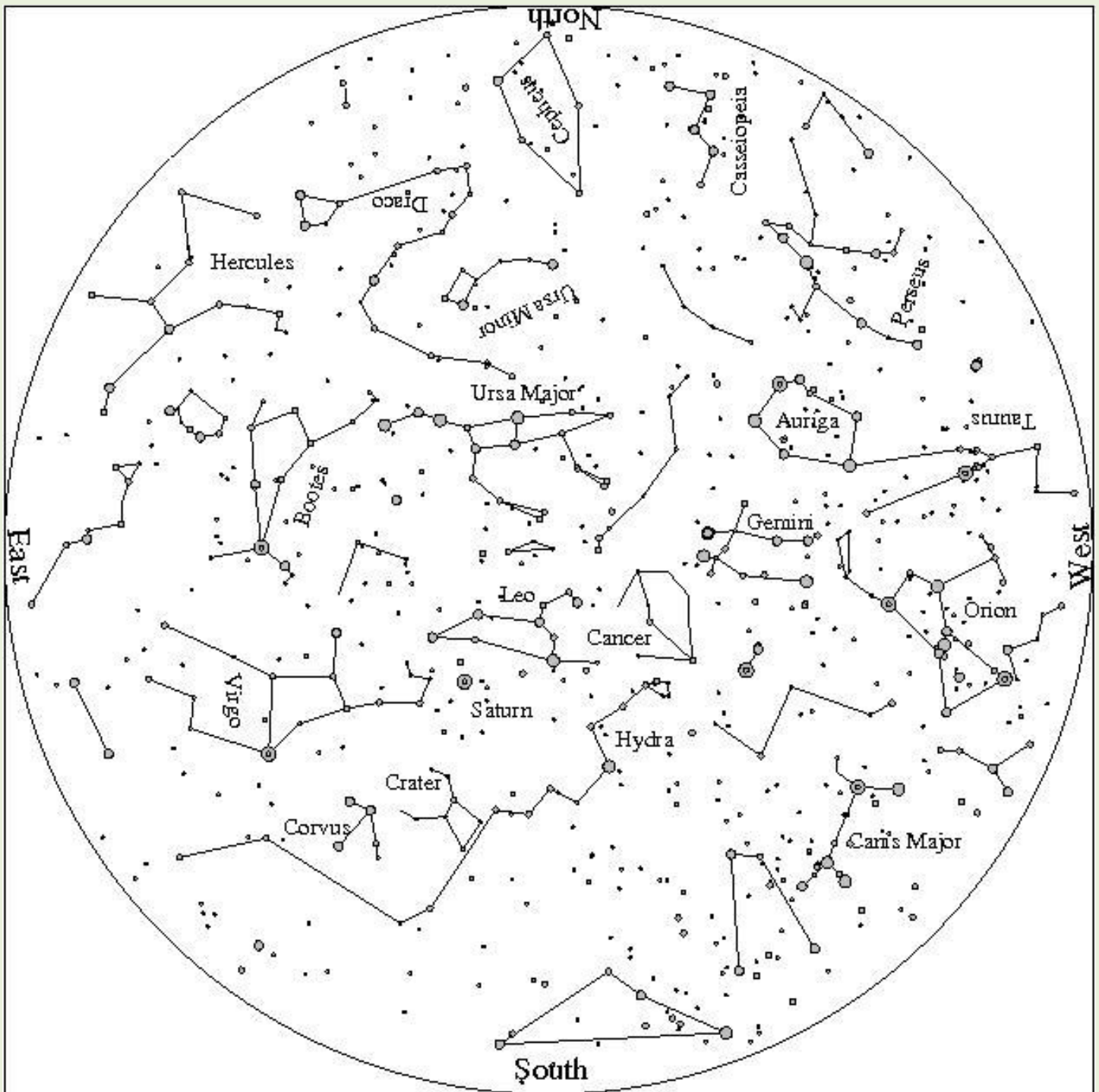
Saturn lies in the southern sky at sunset in Leo.

Venus and Mars lie in the sky at dusk for the morning commuters.

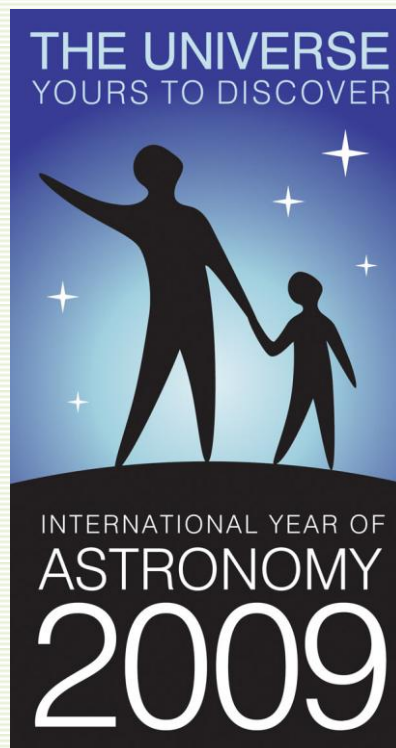
Calendar for May. 2009

- May 4th.** Planetarium Public Night
- May 5th.** Mercury-Redstone 3 Launch 1961. First US human space flight. A. Shepard.
- May 5th.** Eta Aquarid Meteors peak.
- May. 12th.** Planetarium Public Night.
- May. 19th.** Planetarium Public Night.
- May 23rd** Cane Creek Star Party
- May 24th.** Copernicus dies, 1543
- May. 26th.** Planetarium Public Night
- May. 28rd.** Shoals Astronomy Club Meeting 7:00PM. UNA Planetarium.

The May 2009 Sky for North Alabama



How to use this Chart: The sky is shown for 8:00PM, May 15th 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. <http://www.una.edu/planetarium/>.



Cane Creek Star Party

In collaboration with the Shoals Environmental Alliance, UNA planetarium and Observatory and the Shoals Astronomy Club will be doing an all-day nature celebration. The Alliance will conduct a nature walk on the afternoon of May 23rd at Cane Creek nature preserve. This will be followed by a barbeque and cookout. After everyone is full, the UNA Planetarium staff and the Shoals Astronomy Club will distribute Star Wheels for learning the constellations, and describe how to use them. If weather permits, observing through portable telescopes will follow.

Contact: Jim & Faye Lacefield (256) 381-6301 or Charles Rose (356) 366-1937.

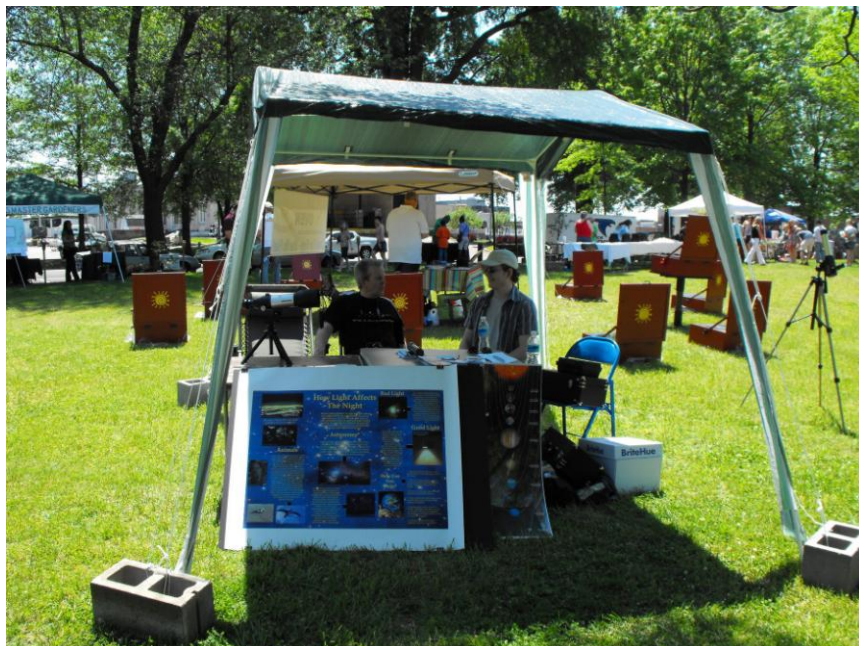
This event is sponsored in part by Fresh Air Family organization through a grant to the Environmental Alliance.

<http://www.freshairfamily.org/>

UNA Projects and Initiatives

Earth Day 2009

UNA Planetarium collaborated with the Shoals Astronomy Club for Earth Day on April 24th to raise awareness about light pollution. **All images by Mel Blake.**



Adam Blacklidge and Dave Davis man the booth.



Matthew Sherril, VP Shoals Astronomy Club teaches the kids.

Recent Visitors

The kids from Joseph Elementary school visited April 29th. Here they build models of comets.



The kids from Central Elementary dropped in suddenly on April 30th. Their field trip to a local farm was canceled due to the flu outbreak and the principal and teacher were organizing the field trip as they went. They booked the planetarium on 1.5 hours notice! They were a fun group, and the kids barely seemed to notice!