UNA Planetarium Newsletter

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From your Editor

March 20th marks the first day of spring. In traditional cultures this represented a time of renewal and celebration. The long cold winter was over and warm weather was on the way. From an astronomical point of view, the first day of spring takes on another meaning.

The Earth orbits the Sun once every 365.24 days. This causes the Sun to appear in different directions of the Universe over the course of the year. The 12 constellations the Sun appears in the direction of make up the Zodiac, which is the basis of the superstition of astrology. The Earth's axis of spin is tilted to its orbit, which causes the Sun to appear further north or further south during the year. Twice a year the Sun is exactly half-way between the north and south poles on the sky. These are the spring and autumnal equinoxes. March 20th marks the Spring Equinox. There is nothing mysterious about this; it is simply geometry.

Things are complicated by the fact that the Earth's spin axis wobbles over a 26000 year cycle, making the location of the Sun during the different times of year change. This precession of the equinoxes was known to the ancient Greeks. From year to year it is not noticeable, but over hundreds of years in is clear. This means the location of the Sun in the sky no longer matches what astrologers say. There was a recent controversy over the "new Zodiac". If more astronomy were taught in schools no one would have been surprised at all. By the way, if you married someone thinking your "sign" and theirs matched, and now it doesn't please don't divorce your sweetie. I'm sure they are still great. That's not the kind of renewal the spring equinox is about!

Mel Blake

Director UNA Planetarium and Observatory.

Image of the Month

This image is of the galaxy NGC2841 from the Hubble Space telescope. The elegant spiral arms are distinct, as well as the dust lanes and central nucleus. The red dots mixed with the arms are areas where new stars are being born in this galaxy. NGC2841 is 46 million light-years away in the constellation of Ursa Major. **Image courtesy NASA.**

Astro Quote: "Through space the universe encompasses and swallows me up like an atom; through thought I comprehend the world."
Blaise Pascal

Observing Highlights

Saturn arrives in the sky this month visible in the eastern sky and lying due south at midnight.

Look for the planets Mercury and Jupiter in the twilight sky at dusk in midmonth. This will be the best viewing of Mercury all year.

Calendar for March. 2011

Mar. 15th. Planetarium Public Night.

Mar. 17th. Messenger at Mercury.

Mar. 19th. Space Rocks Event Florence Public Library.

Mar 20th. First day of Spring.

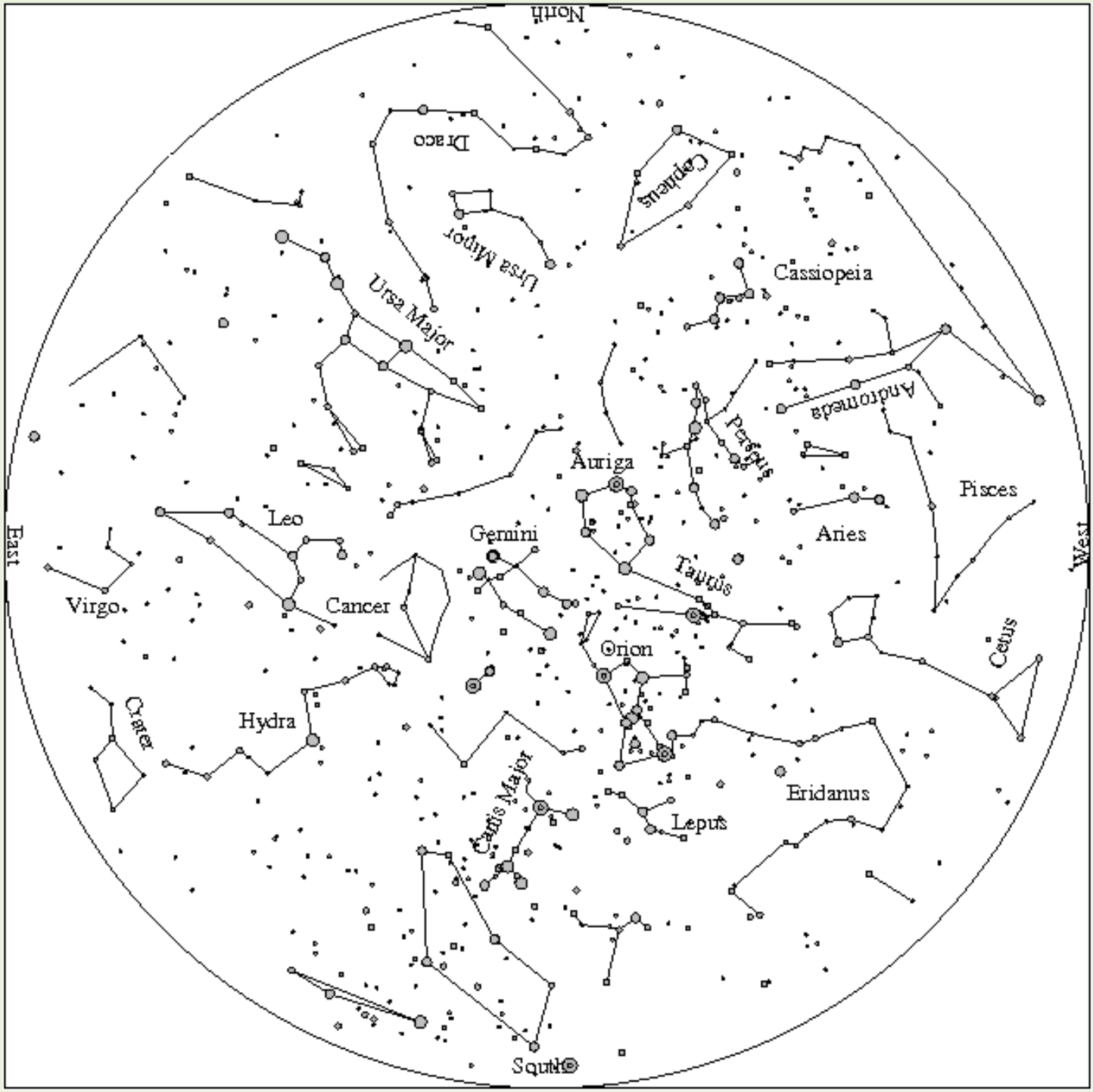
Mar. 22nd. Planetarium Public Night

Mar 24th. Shoals Astronomy Club meeting.

Mar 25th. Planetarium Public Night.

April 5th. Planetarium Public Night.

The March 2011 Sky for North Alabama



How to use this Chart: The sky is shown for 8:00PM, March16th 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/.

Recent Visitors

Our regular tours for schools and community groups continue

We seeing more visits from scout troops in the area. Here scouts make balloon-powered rocket cars during a visit on Feb 21st.

Students from Decatur Christian Academy visited on February 9th. They learned about the winter constellations and comets.

Elementary school kids enjoy making comet models. The students from Early Art School visited on Feb 18th.

Group Bookings

UNA Planetarium takes bookings from all types of groups. We do programs for schools, scout troops and church organizations. If you group in interested, feel free to contact us.

Upcoming Events

Space Rocks at Florence Library

The Shoals Astronomy Club and the Florence Public Library will team up with the UNA Planetarium for a special afternoon of solar system related activities for families. Using a kit from NASA's Night Sky Network, club members will teach kids about meteor craters and the ages of the Moon's surface, how we find asteroids in space and how you can identify meteorites featuring real meteorites. These hands-on activities will be supplemented with a solar telescope from the UNA Planetarium which will allow safe viewing of the Sun if weather permits. The fun will start at 1pm on Saturday, March 19th and last about two hours. All are welcome. There is no charge for this event. Note that the meteor cratering activity involves making real craters with flour and cocoa, so dress to get a little messy!

Public Programs

Our regular public programs take place on Tuesday and Friday nights at 7PM this month. We also do one Saturday progam a month, which will be at 1PM on March 26th. The programs include a discussion of this month's constellations and if weather allows, viewing through our 114-inch telescope. If weather is poor we watch a video. Programs are intended for a general audience and all age groups. $3/person, UNA students free.

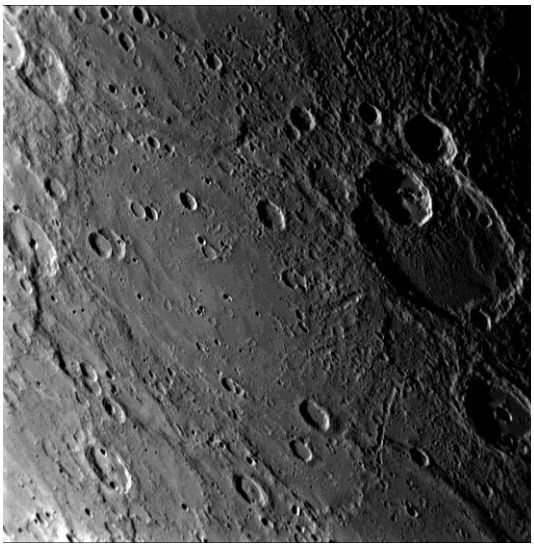
Shoals Astronomy Club

Due to spring break, the Shoals Astronomy Club will meet at 7PM on Thursday, March 24, the second last Thursday of the month instead of the last Thursday of the month. All are welcome! No equipment or experience in astronomy is needed, just curiosity!

☿ Messenger at Mercury

On Thursday, March 17th, at 7:45PM CDT, the Messenger spacecraft will attempt to become the first to orbit the planet Mercury. If successful the craft should provide a complete map of mercury in unprecedented detail, study Mercury's magnetic field and the permanently shadowed craters near the poles of the planet that may contain water ice. It has taken the spacecraft six years and three flybys of Mercury to get to the innermost planet, and orbital insertion will take only 14 minutes!

UNA Planetarium will have a special program starting at 6:55PM CDT featuring a live webcast from Johns Hopkins Applied Physics Lab. There will be a talk about the Messenger mission and animations of the mission and orbit insertion. This will be followed by live coverage as Messenger enters orbit around Mercury. We will have some posters, stickers and buttons available from the Messenger team. All are welcome!



Messenger image of Mercury. Courtesy NASA