

# UNA Planetarium Newsletter

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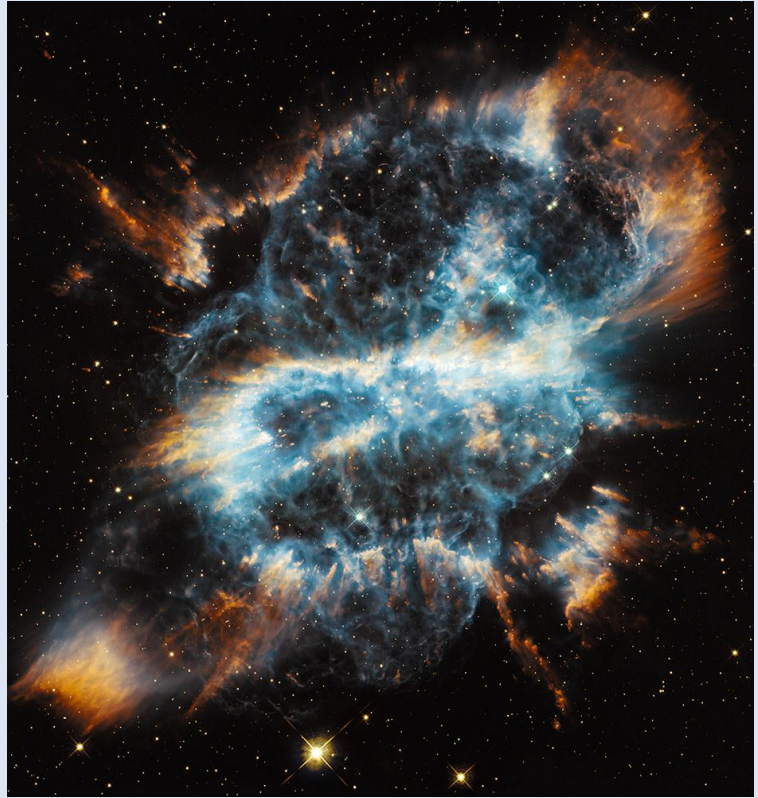
We survived the supposed end of the world and have arrived at 2013. It turns out that this year may be one of the best years for casual night sky watchers that we have had for some time. While the partial eclipse and Venus transit were exciting last year, you needed to have special equipment for viewing them safely. Of course the Geminid meteors were great under a new moon and that made for a good end of year celebration. However if things work to, 2013 should be even better, thanks to the visit of not one but potentially two comets that should light up the sky this year.

The first comet is comet which was discovered by the PanSTARRS project. The comet should reach a peak brightness in March that will make it visible to the unaided eye. This comet in any other year would be the event of the year for amateur astronomers. However, Comet ISON is set to be what is called a "Great Comet". The object has an orbit that takes millions of years to complete and it may be its first time to visit our neighborhood. Some astronomers are predicting that it may become as bright as the full moon in the sky by December. One can picture watching the Geminid meteors and a great comet at the same time! Comets are notoriously hard to predict, but even if it does not live up to its billing, ISON will almost surely be visible without a telescope. 2013 should be a great year for those who like to watch the sky without a telescope!

Mel Blake.

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

## Image of the Month



This image from the Hubble Space Telescope shows the nebula NGC5189. NGC5189 is a planetary nebula, which are created when stars like the Sun run out of fuel in their cores and eject much of their gas into space. The hot core of the star becomes a compact object the size of the Earth called a white dwarf. It is the light from the white dwarf that causes the gases to glow. Old stars often eject gases in more than one episode the shells of gas can create complex patterns. NGC5189 lies about 1800 light years away in the constellation Musca and is about 3 light years across. **Courtesy NASA.**

**Astro Quote:** *"The stars, they are as the sun. Each star. Every star. And those spheres- they are worlds, realms, each one different yet the same."* Steven Erikson,

## Observing Highlights

Jupiter continues to shine high in the southwest before midnight in the constellation Taurus.

Comet PanSTARRS may reach naked eye brightness

## Calendar for March. 2013

**Mar 5 Planetarium Public Night**

**Mar 10 PanSTARRS Perihelion**

**Mar 12 Planetarium Public Night**

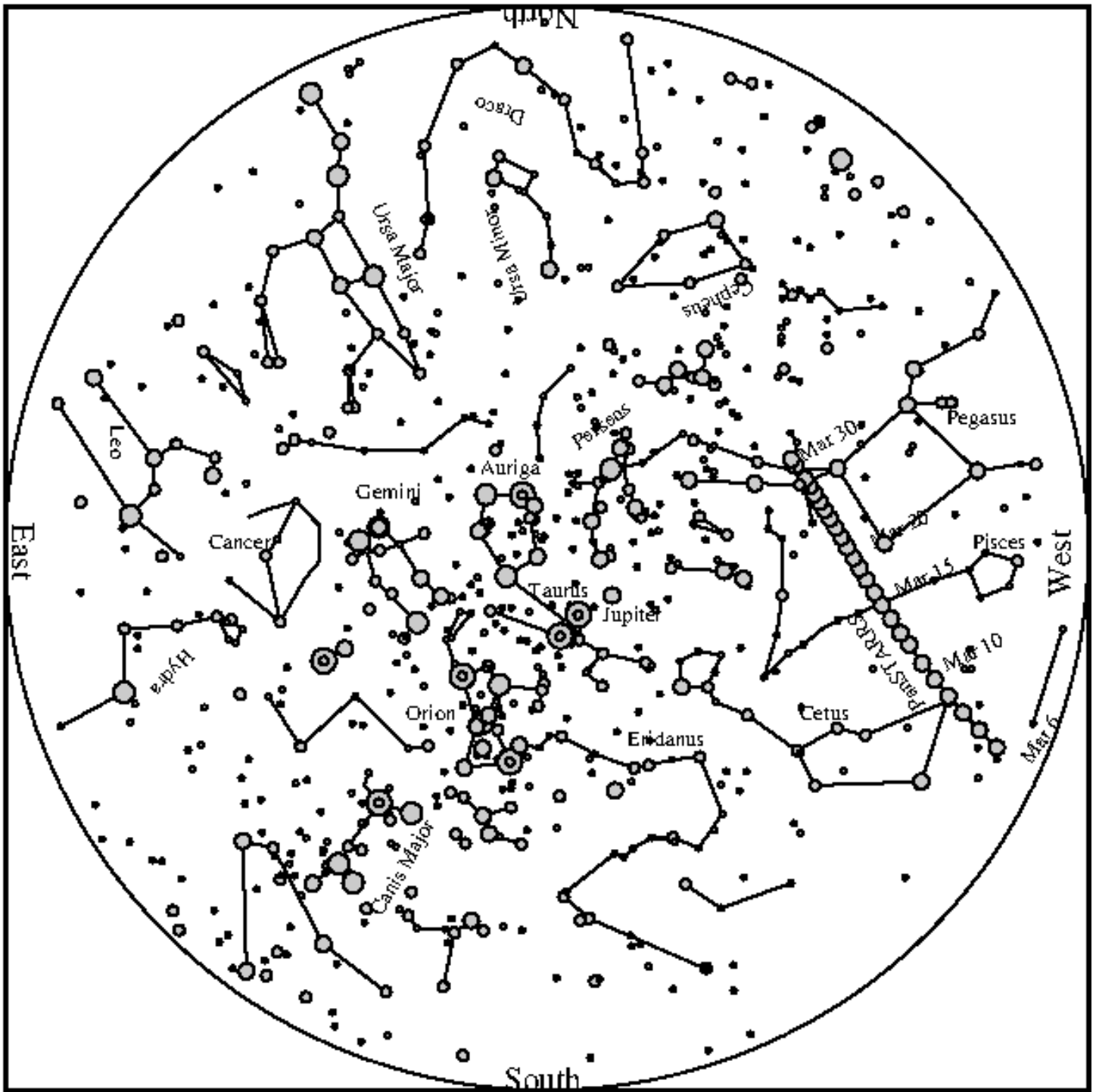
**Mar 14 Public Talk. Erika Grunstrom.**

**Mar 18 "Christa McAuliffe: Reach for the Stars"**

**Mar 19 Planetarium Public Night**

**Mar 28. Shoals Astronomy Club Meeting**

## The March 2013 Sky for North Alabama



**How to use this Chart:** The sky is shown for 7:00PM, March 15<sup>th</sup> 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/>.

### Comet Panstarrs

Comets are notoriously hard to predict in terms of peak brightness, so take caution that I am not predicting an incredibly bright comet. Comet PanSTARRS will reach its closest point to the Sun, called perihelion, around March 10<sup>th</sup>, when it should be at its brightest. Most predictions for the comet are that it will be visible to the unaided eye for most of the rest of March, fading in brightness as April approaches. If so, while not living up to its initial hype, it should still make for a very nice comet in the western sky after sunset. These are just predictions and once again, comets are known to be very difficult to predict. Even the most pessimistic calculations however make it a good object of binoculars. If its brightness is sufficient UNA Planetarium may offer public observing sessions for people to come view the comet. Please stay tuned to our website or Facebook page for more information. Our monthly chart shows where to look for PanSTARRS each day at 7PM. The key is to have an unobstructed view towards the western horizon.

### Women's History Month

To celebrate Women's History Month UNA Planetarium will host several events. The first event will be a guest lecture by Dr. Erika Grundstrom from Vanderbilt University. She will give a lecture entitled "Enjoying an Astronomical Lifestyle: Hot Stars with Disks, Education, and Outreach", at 2PM, March 14<sup>th</sup> at the planetarium. Dr. Grundstrom is an expert on binary stars and massive stars. She also operates a portable planetarium for educating the about astronomy. Her talk should give a great insight into what it is like to be an astronomer.

On March 18<sup>th</sup> at 7PM UNA planetarium will show the documentary "Christa McAuliffe: Reach for the Stars". This documentary is about the life of Christa McAuliffe who was part of NASA's Teacher in Space program. She died in the Challenger explosion, but is an inspiration to many kids who want to go into space.

### NASA Digital Learning Network

NASA's Digital Learning Network serves students and teachers by delivering videoconferences and webcasts that feature NASA-related science, technology, engineering and mathematics instruction. With standards-based IP videoconference systems and high-speed Internet connectivity, participants can take advantage of free interactive lessons and professional development events through distance learning technologies. Register for free, interactive events listed in their catalog or watch our webcasts below.

<http://www.nasa.gov/offices/education/programs/national/dln/ind>

### Mars Workshop for Teachers

We wanted to let you know about an exciting opportunity to participate in an upcoming **Mars Workshop** at the Space Sciences Lab in July—*If this is not your grade level, please pass this on to a colleague who might be interested!* We know that July sounds far off, but these workshops fill up quickly...

#### MAVEN Education Ambassadors! (MEA)

#### A workshop for Middle and High School Teachers

**July 8th - 12th, 2013**

**UC Berkeley, CA**

*Participants will receive a \$700 travel stipend for attending the Berkeley workshop (free housing and meals are provided), plus a \$700 honorarium after conducting a local workshop.*

The Mars Atmosphere and Volatile Evolution Mission (MAVEN), set to launch in November 2013, will explore the planet's upper atmosphere, ionosphere and interactions with the solar wind. The mission will provide invaluable insight into the history of Mars' atmosphere and climate, liquid water, and planetary habitability.

The MAVEN Educator Ambassador (MEA) program will bring together middle and high school educators from around the country for in-depth learning experiences around MAVEN science (Earth, Space, and Physical Science). The goal of the MEA program is to develop the capacity and provide the opportunity for educators to train other teachers on NASA's educational resources.

In this NASA-funded program, you will receive training to become a MAVEN Ambassador. We will provide you with a week-long professional development workshop, training on a variety of standards-based classroom activities, plus follow-up support for several years. Participants are expected to implement some of the lesson plans and education resources in their own classrooms, as well as conduct teacher trainings in their local area on the mission and related education activities.

For further information, use subject heading "MEA," and contact: [epomail@lasp.colorado.edu](mailto:epomail@lasp.colorado.edu)

Apply today!

<http://lasp.colorado.edu/home/maven/education-outreach/for-educators/mea/>