

# Astrofiles

Auburn Astronomical Society E-Newsletter

November, 2009

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## Events Calendar

We'll hold our November meeting on **Friday, November 13**, at **7:45PM**, [in room 215](#) of [Davis Hall, the Aerospace Engineering Building](#). The doors to the building automatically lock at 8:00PM, so if you're running late, rap on the door nearest our meeting room and we'll let you in. It's an away game weekend in Auburn, so it should be a little easier to find a parking space.

Riders from the Montgomery area are welcome to meet at the [home](#) of Russell Whigham, [518 Seminole Dr.](#), and carpool over to Auburn. Plan to be ready to leave for Auburn at 6:45PM.

Our new moon star party this month will be on **Saturday, November 14**, at [Cliff Hill's farm](#)

November 06, **Normal first Friday meeting changed** to 11/13 because of home football game

November 13, November meeting, 7:45 PM, [in room 215](#) of [Davis Hall](#)

November 14, Star party at [Cliff Hill's farm](#)

November 21, Public stargaze from 7-10 p.m, Mary Olive Thomas Demonstration Forest

December 4, December meeting, 7:45 PM, [in room 215](#) of [Davis Hall](#)

December 12, Star party at [Cliff Hill's farm](#)

## Wetumpka Crater Tours

Dr. David King

This year the Elmore County Economic Development office is coordinating the 2010 crater tours on Feb. 20. Their contact is Amanda MacDonald Brasington, Tourism Coordinator. Her number is 334-514-5843. Her e-mail is:

[<amacdonald@elmoreco.org>](mailto:amacdonald@elmoreco.org).

There may be a lot of interest this year, so it is wise to make reservations early.

Best wishes.. David

David T. King, Jr.  
Professor of Geology

## MOTDF Public Stargaze

For the past several years, **Jennifer Lolley** and the members of the [Forest Ecology Preserve](#) group have invited us to come to the Mary Olive Thomas Demonstration Forest on Moore's Mill Road in Auburn to host a stargaze. This year's Fall Astronomy Night will be on **Saturday evening, November 21**, from **7:00 - 10:00 p.m. CST**. [Sunset](#) is at 4:38 CST. If you'd like to set up your equipment before dark, you should try to be there by 4:30. The five day old [Moonset](#) is at 8:52. **Europa** begins its **transit** of Jupiter at 7:30. Please [let us know](#) if you think you can be there with your telescope.

The site is about 1/3 mile off the road (Moore's Mill) on a very accessible dirt/grass road. It contains a nice open area (about 3 to 4 acres) for viewing, with good visibility to the east and south, acceptable viewing to the west, and Auburn city lights to the north. There is a covered pavilion area with restrooms for the guys and gals. It has power and lights, and the lights are on switches. The road, and a residence near the road, are definitely well shielded by trees. Oh, and there's a nice parking area for visitors too.

### Directions to Mary Olive Thomas Forest:

For those familiar with Auburn: on Moore's Mill Road, one mile east of the Ogletree Village shopping center ... on the north side of the road. There will be a sign at the gate. The shopping center is at the intersection of Moores Mill Road and Ogletree-Hamilton road. This intersection is east of Dean Road, on Moore's Mill.

For those coming from out of town: take exit 58 off I-85 (Tigertown exit) south (away from Tigertown) on Gateway Drive . Follow the curve toward the east and, approximately 0.7 miles after you get off the interstate, turn right on Society Hill Road (runs north-south). It's a fairly large intersection, so it'll be hard to miss. Approximately 3.2 miles later, Society Hill intersects Moores Mill at a flashing red light. There's a convenience store called the LAZ-B at this intersection. Turn right on Moores Mill. The gate will be about 0.9 mile on the right.

Latitude: 32° 34.881'N  
Longitude: 85° 25.328'W

If this will be your first time there, you can have a look at our past stargazes there at:  
<<http://www.auburnastro.org/trips/outreach/fep.htm>>

## Midnight Telescopes

Tom McGowan gave a wonderful presentation/demonstration of his beautifully crafted and well designed 12.5-inch telescope at our October meeting. Tom has reduced the price to \$2795.00.

See Tom's ads on our [Astronomical Exchange](#) page and on [Astromart](#).

## Magazine Subscription/Renewals

John B. Zachry

Editor's note: Club subscriptions to *Sky & Telescope* and *Astronomy* magazine were sent in last month. John has written that if you missed the initial offer, he'll still submit your discount subscription. Thanks to John for doing this for us. RDW

AAS discount subscriptions/renewals to *Sky & Telescope* and *Astronomy* magazine are due in October and November. *Sky & Telescope* discount rate is \$ 32.95 (Regular \$ 42.95), and *Astronomy* magazine is \$34.00 for AAS members (Regular \$ 42.95). Subscriptions for to both will be \$66.95.

**Make checks payable to Auburn Astronomical Society.** Only members of Auburn Astronomical Society are entitled to club subscription rates. If you are unable to attend our October meeting, mail checks to:

Auburn Astronomical Society  
c/o John B. Zachry  
501 Summerfield Road  
West Point, GA 31833

## Space News

John B. Zachry

Nov. 02	Cassini spacecraft will make its deepest plume passage yet, flying 63.8 miles from the surface of Enceladus. <a href="http://saturn.jpl.nasa.gov/mission/flybys/enceladus20091102/">http://saturn.jpl.nasa.gov/mission/flybys/enceladus20091102/</a>
Nov. 10	Mini-Research Module 2, a new docking compartment for the International Space Station. launch aboard a Soyuz rocket at 8:22 a.m. CST. <a href="http://www.spaceflightnow.com/station/exp21/091013mrm/">http://www.spaceflightnow.com/station/exp21/091013mrm/</a>
Nov. 13	<u>Dawn</u> spacecraft enters the Asteroid Belt for 2 <sup>nd</sup> and final time. <a href="http://www2.jpl.nasa.gov/calendar/">http://www2.jpl.nasa.gov/calendar/</a>
Nov. 16	<u>STS-129 Launch</u> , Space Shuttle Atlantis (STS-129) launch to International Space Station at 1:28 p.m. CST. Will deliver the first two Express Logistics Carriers with an array of spare parts for the outpost
Nov. 20	Mars Fall in Mars Southern Hemisphere begins. Site of Mars Rovers Spirit and Opportunity.
Nov. 17	<u>Leonids Meteor Shower</u> Peak. <a href="http://www2.jpl.nasa.gov/calendar/">http://www2.jpl.nasa.gov/calendar/</a>
Nov. 21	<u>Cassini</u> , Enceladus & Rhea Flyby
Dec. 07	<u>Widefield Infrared Survey Explorer (WISE) Delta 2 Launch</u> at 8:10-8:23 a.m. CST. Satellite will observe the entire sky in mid-infrared wavelengths with greater sensitivity than ever before.
Dec. 12	<u>Cassini</u> , Titan Flyby
Dec. 13	<u>Geminids Meteor Shower</u> Peak
Dec. 20	<u>Soyuz TMA-17 Soyuz FG Launch</u> (International Space Station 21S)
Dec. 21	<u>Winter Solstice, 17:47 UT</u>
Dec. 22	<u>Ursids Meteor Shower</u> Peak
Dec. 28	<u>Cassini</u> , Titan Flyby
Dec. 31	<u>Venus Express, Mars Express, End of Extended Mission</u>
Dec. 31	<u>Partial Lunar Eclipse</u>

## CNF Stargaze Report

October 12-17 was supposed to be the best time of the year for regional and local star parties. Weather patterns had other ideas. **William Baugh** had travelled early in the week to the Peach State Star Gaze, but returned home after two nights of clouds and more in the forecast. The cold front didn't clear the skies until Saturday night/Sunday morning. **Ray Kunert** and I, having more flexible schedules than some, opted to travel to [Concuh National Forest](#) for an all-nighter on Sunday evening (October, 18) when near perfect conditions were predicted. As is the tradition now, we stopped at the Church's Chicken in Brewton and picked up our chicken sandwiches to go, then drove the last twenty-five miles to CNF. The trip was uneventful until we turned onto the forestry road from US 29N. The recent heavy rains left a giant mud puddle/small pond in the road and had washed out parts of the sandy road in several places. I went first in the 4WD Blazer and Ray's minivan was able to navigate the road hazards as well as the berm at the entrance to the field by carefully attacking it from an acute angle. We dispatched several briars near where we set up the telescopes. Ray would be putting his new TEC 140 f/7 APO refractor through its first dark sky trials. I had the C-11, as usual.

Sunset was around 6:15 and Jupiter popped out easily in the deep blue sky shortly after. We ate our supper while waiting for dark. With polar alignment out of the way, we started with glorious views of the "summer" objects in the Milky Way in the west. It was soon obvious that the high humidity was going to be a problem. The transparency was good, but when you hear the dew "raining" onto the canvas tarp, it's time to crank up the juice on the dew controllers. By 9:00, I was getting the low voltage alarm from my inverter. I replaced the first "jump start" battery with the spare as I worked westward across the sky. Ray had better luck with the dew issue, but the falling temperatures took its toll on his laptop's battery. Fortunately, the sky is so dark, that Ray didn't need the go to feature because so many of the objects are naked-eye down there. We continued with objects on our observing lists. The refractor was really in its element on the wide-field objects like the Double Cluster and the Andromeda complex. By midnight, the dew was winning the battle with my optics and the cold with Ray's drive. I tried in vain for the next hour to spot some of the geo-synchronous satellites that John Tatarchuk has always been so good at finding for us. We sure missed you, John. After the batteries all died, we had our naps before heading back home at daylight.

If you've never observed from dark skies, you should plan to join us down there next October.

### Cool Links

The reason for no green stars

<<http://blogs.discovermagazine.com/badastronomy/2008/07/29/why-are-there-no-green-stars/>>

Remember the [Kiesel Park Observatory](#) project? Here's AU's 16-inch redux:

< [http://electro.physics.auburn.edu/~au\\_astro/16inchDOB.html](http://electro.physics.auburn.edu/~au_astro/16inchDOB.html)>

Did Galileo discover Neptune?

<<http://www.sciencedaily.com/releases/2009/07/090709095427.htm>>

The famed Hubble Space Telescope is no longer the biggest space telescope, and for viewing the births of stars in the infrared, no longer the best either. [The Herschel Space Telescope](#) honors William Herschel's discovery of heat as infrared wavelengths with just a thermometer and a prism back around 1800. Link to it at: <<http://www.skyandtelescope.com/news/63275062.html>>

The sky is falling... Again –NOT! <<http://www.skyandtelescope.com/news/64430612.html>>

NASA's Interstellar Boundary Explorer, or IBEX, spacecraft has made it possible for scientists to construct the first comprehensive sky map of our solar system and its location in the Milky Way galaxy. <[http://www.nasa.gov/mission\\_pages/ibex/allsky\\_map.html](http://www.nasa.gov/mission_pages/ibex/allsky_map.html)>

Very few extremely massive stars collapse into black holes as they die...most instead collapse into neutron stars, which may be detected if still new enough and hot enough as pulsars in gamma ray wavelengths. Fermi is finding them by the handfuls...  
<[http://www.nasa.gov/home/hqnews/2009/jul/HQ\\_09-153\\_Fermi\\_Probes\\_Pulsars.html](http://www.nasa.gov/home/hqnews/2009/jul/HQ_09-153_Fermi_Probes_Pulsars.html)>

Retracing the observations of Galileo  
<<http://www.universetoday.com/2009/10/14/amateur-astronomer-is-chasing-galileo/>>

Reassembling Clyde Tombaugh's 16-inch reflecting telescope.  
<<http://cs.astronomy.com/asycs/blogs/astronomy/2009/01/28/on-the-road-working-on-a-classic.aspx>>

See the current week in space online: <http://www.yearinspace.com/the-week-in-space>

Sign up for the free weekly newsletter: <http://www.yearinspace.com/weekly-e-mail>

Learn about the 144-page desk calendar: <http://www.yearinspace.com/desk-calendar>

Blue Light <[http://docs.darksky.org/PR/PR\\_Blue\\_White\\_Light.pdf](http://docs.darksky.org/PR/PR_Blue_White_Light.pdf)>

White House star party: <<http://www.whitehouse.gov/blog/White-House-to-Host-Star-Party/>>

Mysterious supernova in a class of its own  
<http://www.abc.net.au/science/articles/2009/11/06/2734995.htm?site=science&topic=space>

Hope to see everyone at the meeting,

Russell