

# Astrofiles

## Auburn Astronomical Society E-Newsletter

April, 2010

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### Events Calendar

We'll hold our March meeting on **Friday, April 2**, 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. 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 dark-sky **star party** this month will be on **Saturday, April 10**, at [Cliff Hill's farm](#)

April 02, April meeting, 7:45 PM, [in room 215](#) of [Davis Hall](#)

**April 03**, [American Heritage Girls Stargaze](#), near Prattville

April 06, Last quarter moon

April 08, Mercury at greatest elongation; best evening view this year

April 10 Star party at [Cliff Hill's farm](#)

April 14, New Moon

April 15, Crescent Moon, Venus, Mercury grouping in west just after sunset

**April 16**, [Eastwood School Stargaze](#) in Pike Road

**April 17**, [Forest Ecology Preserve Stargaze](#) at the Demonstration Forest

April 22, First quarter moon

April 23, Moon passes 4.4 degrees south of Mars

**April 24**, [National Astronomy Day](#)

April, 25 Waxing gibbous moon passes 7 degrees south of Saturn

April 26, Venus [appulse](#) with Pleiades

April 27, Favorable ISS passage

April 28, Full Moon

May 07, May meeting, 7:45 PM, [in room 215](#) of [Davis Hall](#)

May, 13-16 [Georgia Sky View 2010](#), Camp McIntosh - Indian Springs Park (near Jackson, GA)

## Volunteers Needed

April is going to be a very busy month for us. [Please let me know](#) which of these you'll be able to help:

- April 03, American Heritage Girls Stargaze, near Prattville
- April 16, Eastwood School Stargaze in Pike Road
- April 17, Forest Ecology Preserve Stargaze at the Demonstration Forest, in Auburn
- April 24, National Astronomy Day, in Montgomery.

### American Heritage Girls' Leader Troop 0125 Stargaze April 3

Terri Klose, troop leader for her American Heritage Girls in Prattville, wrote to ask if we could bring our telescopes for the girls in her troop. The location will be at a home off of Autauga County Road 40, between Prattville and Deatsville. They want to work on their space exploration merit badge. We had to cancel the original stargaze date because of clouds. We've rescheduled this event for **Saturday, April 3. Ray Kunert, Frank Ward**, and your editor are onboard for this one.

### Eastwood Christian School Stargaze April 16

Tracy Shamburger, a parent at Eastwood Christian School, wrote to request that we host a stargaze on **Friday, April 16**, at a farm in Pike Road. If there is any way you could make this event that would be great. I replied to Tracy that we already had another stargaze scheduled in Auburn on Saturday, April 17, and that our annual Astronomy Day event at the planetarium here in Montgomery would be on the following Saturday, April 24. I know that we're going to be quite busy with events in the middle of April, but if you can help, please [let me know](#) so I can let Tracy know our plans.

### Forest Ecology Preserve Mary Olive Thomas Demonstration Forest Auburn April 17

Jennifer Lolley and the members of her Forest Ecology Preserve group have invited us back to the Mary Olive Thomas Demonstration Forest for a stargaze. Jennifer has sent out flyers announcing a 7:00 PM start time. Sunset will be about 7:14 PM. The gate will be open from 5:30 on, if you prefer to set up your scope before dark.

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 . This exit road takes a curve toward the east and, approximately 0.7 miles after you get off the interstate, intersects 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.

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

[Let us know](#) if you can bring your telescope. If you'd like to help, but don't have a telescope, we'll need someone to point out the four, 3rd magnitude or brighter [satellites](#) during the first half hour. Check out images of our previous [MOTDF stargazes](#).

## Astronomy Day 2010

Saturday, April 24

The Auburn Astronomical Society in partnership with the [W. A. Gayle Planetarium](#), will celebrate [National Astronomy Day](#), at [the planetarium in Oak Park](#) in Montgomery, on **Saturday, April 24**. Planetarium director, **Rick Evans**, has secured the keynote speakers, **Dr. Michael Sterner**, and **Dr. Michael Patton**, directors of the [James Wiley Shepherd Observatory](#) at the University of Montevallo. Their presentation will include the construction and operation of their new facility and its [20-inch PlaneWave](#) telescope.

Astronomy Day has traditionally been our best attended event of the year. We extend a special invitation to those of you who live too far away to attend most of our events, to come and spend the afternoon and evening with us. **If you plan to attend**, [please let me know](#). If you're bringing telescopes, let us know what type(s) and size(s). Planetarium director, **Rick Evans**, needs a list of names for the name tags and a head count for refreshments.

If you don't have a telescope, but would like to help, we need volunteers to assist visitors with the **AAS 8-inch** and [12.5-inch Dobsonian](#) telescopes as well as the [ETX-90](#), the [Astroscan](#), [PST solar scope](#), and the [20X80 binoculars](#) from our [loaner scope collection](#). And, we always need help at the **AAS information table** where we'll have some [FAQ](#) and [membership application](#) handouts, and an e-mail sign-up sheet. We will also need someone to help keep an eye on the clock to point out **satellite passes** (times and locations will be provided) to our guests. We'll also need a **digital photographer** to capture images for the Web page.

Here is this year's tentative agenda:

2:00-3:00PM: AAS members and friends begin setting up telescopes in time to have them ready by the time the visitors begin arriving. If you can't be there that early, just come when you can. We'll try to set up around the entrance to the planetarium first, and save the area to the east of the sidewalk for those who arrive later.

3:00PM: Early visitors will be able to view the eight-day-old Moon, and the Sun in the light of hydrogen-alpha with the [AAS PST solar scope](#), and members' scopes filtered white-light images.

5:00PM: Telescope Clinic will be open for guests to bring their sick, disassembled, or otherwise malfunctioning telescopes for repair. This year, we will expand the telescope clinic to include a walking tour of our telescopes, stopping at each for the owner to describe

his/her telescope, why they selected the one they did, and its assets and liabilities. If it turns out that there are six SCT's, some owners could use their time to explain:

- Why they have a box full of eyepieces and filters
- How we use sky charts to find invisible things
- Why there are batteries and wires
- Why we use dew shields and light shrouds
- The convenience of "Go-To" scopes
- Image orientation differences
- Focal length, aperture, f/ ratios, fields of view

By spending five minutes or so at each telescope, we could impart a lot of information about telescopes without taxing the visitors' attention spans, and finish in time for Rick to start the indoor programs at 6:00 . When Rick turns them loose to come back out to the telescopes at 8:00, they should have a better appreciation of what they're looking through.

6:00 PM: Dr. Michael Sterner, and Dr. Michael Patton's presentation on the construction and operation of their new observatory at the University of Montevallo in the auditorium and door-prize drawings.

7:00 PM: Rick will present a "Tour of the Night Sky" in the planetarium, giving an overview of what the guests will see when they see when they step outside.

07:22 PM: Sunset

8:00 PM: The guests come out to view Venus, Mars, Saturn, the mountains and craters of the waxing gibbous Moon and several binary star systems. The Moon will be three days past first quarter, making the "Straight Wall" and lunar highlands an impressive view.

For those who have never attended one of our Astronomy Day events, you can get a feel for what goes on, by going to the "**Field Trips**" link from the [AAS menu](#), then to "**W.A. Gayle Planetarium Events**".

Here are a few reminders to help make the most of your Astronomy Day experience:

- Remember to wear your [AAS Shirt](#) if you have one.
- If you are considering the purchase of a telescope, this is a good place to **look and ask questions**.
- If you have a **telescope or accessories for sale**, this will be the best place in town for your yard sale.
- If you have some **old telescope catalogs**, the visitors are happy to have them.
- If you need AC power, you should bring your own cords to plug into the planetarium outlets. It's a good idea to have a tarp to put over the extension cords to prevent visitors from tripping in the dark.
- You'll probably want to bring a **lawn chair** and **sunscreen lotion**.

- Don't forget your **green laser** -- always a hit with the guests.
- Be sure to bring a **step stool** or **ladder** if you anticipate the little ones having trouble getting to your eyepiece.
- It's OK to ease your vehicle up the sidewalk to **unload your gear**. It would be nice to then move your vehicle out on the park road until the event is over.
- Many visitors will ask "**What power is your telescope?**". If you can't do it in your head, it's a good idea to print out a list of your eyepieces and their magnifications.
- As I've stressed before, most of the visitors to Astronomy Day, while impressed with the larger telescopes, are mainly interested in the more modest, entry-level models, that they would be considering. So, if you haven't volunteered because you thought your telescope was "too small", we really need your help. Remember that most of the visitors will be starting out with telescopes just like yours. Who else better to offer helpful suggestions to beginning astronomers?

## Georgia Sky View 2010

May, 13-16

Ray Kunert and your editor are going to the [Georgia Sky View 2010](#), at Camp McIntosh - Indian Springs Park (near Jackson, GA) this year. Want to join us there?

### 2010 Membership

We've had one renewal, **Aniket Shirgaokar**, and two new members, **Manoar Kulkarni**, and **Chris Young**, since last month. This brings our total membership for 2010 to 20.

See the current membership list at: [AAS Members](#)  
<[http://www.auburnastro.org/aas\\_name.htm](http://www.auburnastro.org/aas_name.htm)>

Paid members for 2010 are in blue. If you're grayed out, you're fading fast. If you thought you had paid for the current year but don't see your name listed, contact AAS treasurer, [John B. Zachry](#) to resolve the discrepancy.

AAS memberships (**\$20.00**/\$10.00 for full-time students) are due in January. Make checks payable to "**Auburn Astronomical Society**". If you're unable to attend our March meeting, mail your dues to:

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

If this will be your first time to join, please print out the [Membership Application](#) form, and include it with your check. We need your address to ensure that you'll receive your **Reflector**.

## Space News

John B. Zachry

- Apr ?? - [Lunar Reconnaissance Orbiter \(LRO\)](#), End of Primary Mission
- Apr 02 - [Soyuz TMA-18 Soyuz FG Launch](#) (International Space Station 22S)  
Launch at 12:04 a.m. EST
- Apr 05 - [STS-131 Launch](#), Space Shuttle Discovery, Multi-Purpose Logistics Module  
Launch at 6:21 a.m. EST
- Apr 05 - [Cassini](#), Titan Flyby
- Apr 06 - [Cryosat 2 Dnepr 1 Launch](#)
- Apr 07 - [Cassini](#), Dione Flyby
- Apr 08 - [Mercury](#) At Its Greatest Eastern [Elongation](#) (19 Degrees)
- Apr 12 - Dragon Qualification Unit [Falcon 9 Launch](#)  
Maiden flight of SpaceX Falcon 9 rocket on demonstration mission. Will be used for future resupply missions to I.S.S.
- Apr 15 - [Obama Space Summit](#), Cape Canaveral, Florida
- Apr 19 - [X-37B OTV-1 Atlas 5 Launch](#) (U.S. Military prototype space plane)  
Launch 10 p.m.-2 a.m. EST on April 19th or 20th.
- Apr 22 - [Lyrids Meteor Shower](#) Peak
- Apr 27 - 37<sup>th</sup> Russian Progress cargo launch to I.S.S.
- Apr 28 - [Cassini](#), Enceladus Flyby
- May 14 - STS-132 Space Shuttle Atlantis to I.S.S. with Russian Mini-Research Module 1  
Launch at 3 p.m. EDT
- May 17 - [Akatsuki \(Planet-C\)](#)/ [Ikaros](#)/ Japan Venus Climate Orbiter)
- May 26 - [Mercury](#) At Its Greatest Western [Elongation](#) (25 Degrees)

Hope to see you at the meeting and stargazes,

Russell