

The Focal Point

The Atlanta Astronomy Club
Established 1947
October 2010

Vol. 23 No. 5

Editor: Tom Faber

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October General Meeting

By Keith Burns, A-V Coordinator

Join us for the October meeting of the Atlanta Astronomy Club which will be held on Friday October 22nd at 8PM. Location is the room 207 of White Hall on the Emory University Campus. The meeting will run for 1½ to 2 hours. Before the meeting starts, we run the monthly PowerPoint presentation that gives you all the latest information on up coming meetings, sidewalk astronomy events, and club observing events.

If you have any information you want to put into the pre meeting announcement PowerPoint, please let me (Keith Burns) know. You can contact me at keith_b@bellsouth.net. If you have any announcements you want to make during the meeting, please contact our President Mark Banks, so that he can schedule the time for you during the meeting. His contact information is on page 7.

The Program:

When the president calls the meeting to order, we start the meeting with our featured speaker of the night, Julian Gray, Curator of the Tellus Science Museum in Cartersville will give a talk on Georgia Meteorites. Julian will talk about the meteorites that have fallen on Georgia including the recent one that fell near Cartersville. After Julian is finished with his talk, we move on to the business portion of the meeting. We will then adjourn the meeting and head to one of the local eateries for food, drink, and conversation.

Upcoming AAC Meetings:

November 19th - Angelle Tanner, a Research Associate at Georgia State University will present a talk about Exo-planets.

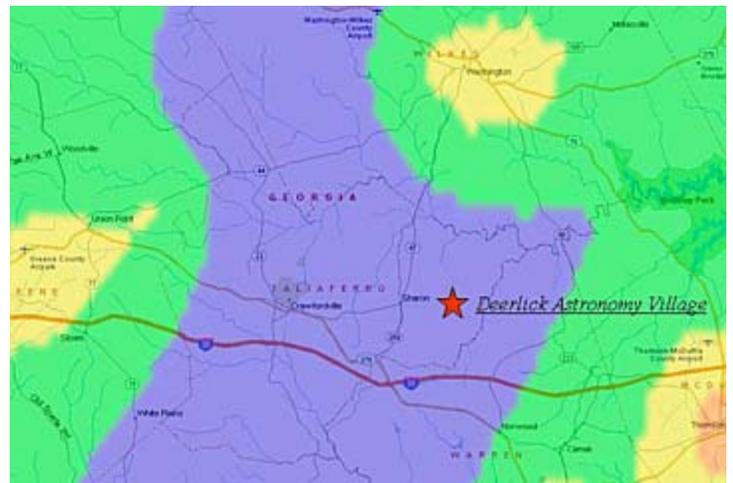
December 11th (Saturday) - Christmas Potluck Dinner and program. Speaker and topic TBA.

Continued on page 7

The Peach State Star Gaze!

By Keith Burns, A-V Coordinator

The next Peach State Star Gaze is here! The AAC's annual star party will again be held at the Deerlick Astronomy Village near Sharon, GA, and run from Sunday, October 3 to Sunday, October 10 (new moon is October 7). DAV has an 11-acre field that has room for RVs, campers, and tents. Limited power is available on the field. Full restrooms with showers are available along with a 40' x 40' pavilion and gas BBQ grill. The Atlanta Astronomy Club's 24" telescope will be set up on the field and AAC's clubhouse will be open. We will have speakers, workshops, and vendors. One speaker will be Sue French who writes the "Deep Sky Wonders" column in Sky & Telescope. She will present a talk titled "A Few of my Favorite Things". Pre-registration is closed now, but walk-ins are still welcome! Please visit us at AtlantaAstronomy.org/pssg/ for details.



The Deerlick Astronomy Village, located about 100 miles east of Atlanta and 50 miles west of Augusta, has some of the darkest skies in the state.

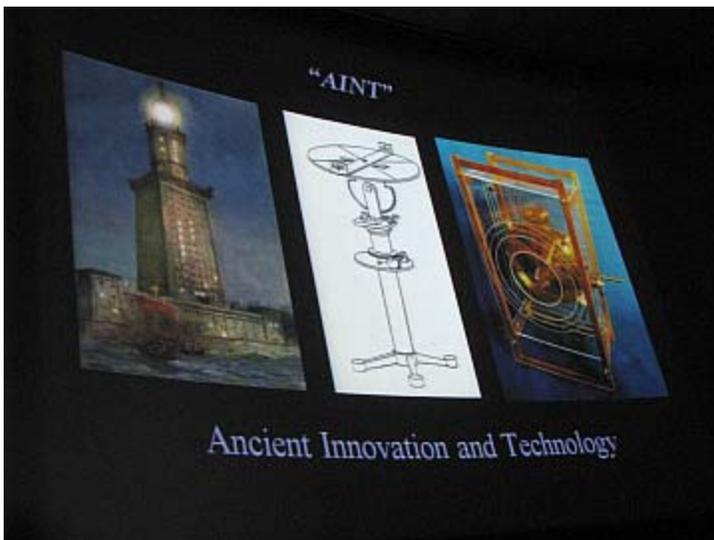


The AAC field at the DAV during the PSSG'08 - Photo by Tom Faber.

September General Meeting Minutes

By Julie Moore, AAC Recording Secretary. Photos by Tom Faber

The general meeting of the Atlanta Astronomy Club opened at 8:00 PM on Friday, September 17 with Mark Banks presiding. Thirty-one members and guests were present. Rich Jakiel (photo below left) and Pixie Bruner (photo below right) spoke on early technology and science, especially in Greek and Roman days (photos bottom and to the right). Many of the innovations that we think of as more recent were actually developed in ancient times then lost only to be rediscovered centuries or millennia later.

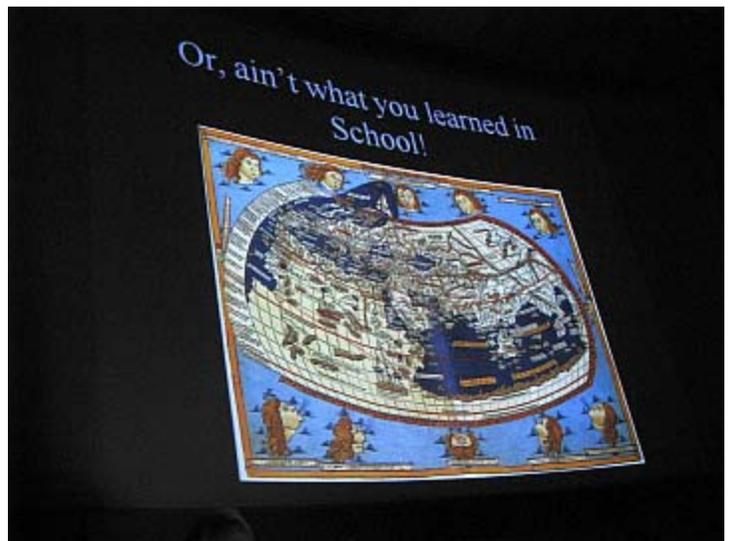


A short business meeting followed the lecture. The Atlanta Science Tavern meets one Saturday a month and they would like a speaker for their September 25th meeting.

PSSG: There are approximately 100 received registration forms so far. Most are for at least 2 attendees. There is a concern about the Micky's Kitchen not being there this year. Everything is on track for speakers. Come on out. It will be great.

Observing Chairman Daniel Herron says there are many opportunities to volunteer at public observing events. Find one you'd enjoy and come out and share your scope and your knowledge!

Innocent Bystander Keith Burns tells us that the AAC warmup building out at Deerlick now sports a shiny coat of sheetrock thanks to Sharon Carruthers and Peter Macumber.



Our AL rep Art Zorka reminded us that September 18 is (was) "Observe the Moon" day. Hope everyone went outside and shared a view with a friend or neighbor. AL observing programs are a great way to kickstart (or restart) your observing. Winter and clear skies are on the way!

Program Chairman Rich Jakiel reminded us that October's program will be about Meteorites and November's will be about Extra-solar planets.

The Next AAC Board Meeting

The next Board meeting of the Atlanta Astronomy Club is scheduled for Sunday, November 7th at 3PM at Emory University in the Math and Science building room N301. Contact President Marks Banks or Board Chair Jim Moore for more information about the meeting agenda.

Bradley Obs Open House Series

2010-2011 Open House Lecture Series

Astronomy Since Galileo (1610 – 2010)

The 400 years since the first astronomical use of the telescope have brought enormous progress to the science of astronomy. Technologies and new areas of science have been brought to bear on outstanding astronomical questions. The development of photography, spectroscopy, quantum mechanics, to name just a few have had profound impacts on our understanding of the universe. This year's lectures will explore the development of astronomy since Galileo. Lectures/Concerts begin at 8 PM. There will be observing with the Beck Telescope afterwards weather permitting.

Fall 2010

October 8, 2010 - LaserFest 2010: "Beam Me Up, Scottie!", A. Sullivan (Agnes Scott College)

November 12, 2010 - "Science and the Catholic Church (1610-2010)", D. McCann (Agnes Scott College)

December 10, 2010 - "Astronomical Technology since the Telescope (1610-2010)", C. De Pree (Agnes Scott College)

Spring 2011

February 11, 2010 - "Sugar and spice and everything nice - is that what space is made of?", Susanna Widicus Weaver (Emory University)

March 25, 2011 - Spring Equinox Concert and Open House

April 15, 2011 - "Jupiter's Galilean Satellites", Melissa McGrath (NASA Marshall Space Flight Center)

May 13, 2011 - "An Evening at the Edge of the Universe", James Webb (Florida International University)

September CE Chapter Minutes

by Marie Lott, CE Recording Secretary

The quarterly potluck dinner meeting of the Charlie Elliott Chapter of the Atlanta Astronomy Club was held on September 11 at the CE Wildlife Visitor Center, beginning at approximately 5:20 PM with socializing and dinner. While we were enjoying dinner, moon phase calendars were distributed to everyone present, compliments of Charles Turner. Ken Poshedly also handed out copies of the ALPO Journal's summer 2010 issue. The final meeting attendance was 27 members and guests.

While dining we were treated to a viewing of NASA's movie "Passport to Pluto" about the New Horizons mission to Pluto-Charon and beyond. The movie chronicled the discovery of Pluto in 1930, the launch of the New Horizons spacecraft in 2006, and the expected rendezvous with Pluto and its moons in 2015.

After the movie, chapter director Theo Ramakers announced that there will be five outreach events in September, including "International Observe the Moon" night on September 18th in Covington. See the chapter calendar at <http://ceastronomy.org> for details. Theo congratulated Carlos Flores and Tim Geib for their beautiful new images of M8. Tim won the Meade DSI challenge in July with his image of the Lagoon, currently on the home page of the chapter web site. Theo reported that two ISS transits were captured last month and explained some of the planning involved in catching the transit. He showed a slide with outlines of the differing areas of the moon captured by different scope and focal reducer setups (80 mm refractor, a C11 and an Antares FR). There will be two more ISS transits coming up this month, one solar and the other lunar.

Steven Philips, Observing Supervisor, presented "Observing 101", highlighting current sun, moon and planet rise & set times as well as observing targets and challenges. Steven reported that a transit of Jupiter's Great Red Spot (GRS) would occur that evening at 10:14 PM but unfortunately the evening's thunderstorms would probably prevent observation. Steven recommended trying a light green, blue or violet filter to view the GRS later in the week. Steven also handed out helpful September Sky Maps from <http://skymaps.com/downloads.html>. In addition to the astro events listed on the Sky Maps calendar, Steven mentioned that on September 24th, the four Galileans moons will be visible all on one side of Jupiter. He also encouraged members to look for Comet 103P/Hartley, possibly brightening to mag 5. In October it will travel through Cassiopeia, Perseus & Gemini. Beginner's Target List for September: M31, M13, M15, M22, M55, M11, M25, M27, M57, Herschel's Garnet Star (Mu Cephei / SAC Red 77 Carbon Star). Intermediate/Advanced NGC Target List for September: NGC 7331, 185, 6712, 6642, 6629, 7209, 7243, 7000, 7662 and 650/651 (M76, the Little Dumbell).

Art Zorka spoke about the Astronomical League and its observing programs. They are a good way to learn the sky and to get more familiar with your equipment. See <http://www.astroleague.org/observing> or talk to Art for more information.

Theo announced that there will be a Saturday work session soon to help move the safety zone signs to their correct locations around the observing field. The observing field is being renamed in memory of Jon Wood. Steven Phillips will collect donations at the next meeting for a memorial sign for the field. Alesia Rast gave club members advice about observing amidst the wildlife & hunters at Charlie Elliott. Alesia suggested playing a radio at night while out observing to help deter roaming coyotes and other animals, and to get into your car if wild hogs approach you on the observing field. Also, there should be no large game hunting at night with firearms, so if shots are heard at night, call 911 and ask them to send a DNR game ranger or sheriff to check for possible poachers.

The meeting was adjourned at approximately 7 PM. There was no observing after the meeting due to passing thunderstorms.

Next CE Chapter Meeting

The next meeting of the Charlie Elliott Chapter will be held October 2, 2010 at 4 PM. Stephen Ramsden will give a talk entitled "Binaries and Conspiracies." The meeting will include the "Observing 101" presentation, "Current Events in Astronomy and Space Exploration," and observing on the field after dark (weather permitting). Future meeting dates this year are: Nov 6, and Dec 4.

Georgia Astronomy in State Parks

by Keith Burns, A-V Coordinator & GASP Coordinator

One of the main things we do in the Atlanta Astronomy Club is to provide sidewalk astronomy events to the public. As an offshoot of sidewalk astronomy, a group of us formed GASP. GASP or Georgia Astronomy in State Parks goes out to select state parks and does an astronomy talk followed by viewing through telescopes. In case of rain, we set up the telescopes inside and show our telescopes to the attendees of the events. The events are always scheduled on a Saturday night. Currently we are doing four of these events per year.

Any Atlanta Astronomy Club member is welcome to join us and help out at one of these events. You don't need a telescope - just being able to answer questions is a big help when dealing with the public. For more information on the group, please contact Keith Burns at keith_b@bellsouth.net.

November 13th at Red Top Mountain State Park on Lake Allatoona. This is close enough to Atlanta for any club member to attend. This event usually draws a large crowd of people. The start time is 7PM.

I was recently contacted by Panola State Park about possibly doing an astronomy program there next year. Time will tell as we discuss this with the ranger there.

We are always looking for new state parks to explore and perhaps do an event at. So if you have any ideas, please let me know about them. Hope to see you at the next event, "out in the wilds and under the stars."

The Astronomical League

As a member of the **Atlanta Astronomy Club** you are automatically also a member of the **Astronomical League**, a nation wide affiliation of astronomy clubs. Membership in the AL provides a number of benefits for you. They include:

- * You will receive *The Reflector*, the AL's quarterly newsletter.
- * You can use the Book Service, through which you can buy astronomy-related books at a 10% discount.
- * You can participate in the Astronomical League's Observing Clubs. The Observing Clubs offer encouragement and certificates of accomplishment for demonstrating observing skills with a variety of instruments and objects. These include the Messier Club, Binocular Messier Club, the Herschel 400 Club, the Deep Sky Binocular Club, and many others.

To learn more about the Astronomical League and its benefits for you, visit <http://www.astroleague.org>. You may also contact the AAC's Astronomical League Correspondent Art Zorka for more information about the AL's Observing Clubs. Contact Art at artzorka@yahoo.com or by phone at 404-633-8822.

Astro Images by Chuck Painter

All pictures taken with the following equipment:

Astro-Tech 8" Ritchey-Chretien at F/8.

Orion Starshoot Pro one shot color camera.

Orion ST-80 F/5 achromatic refractor guidescope.

Orion Starshoot autoguider.

Orion Atlas EQ-G mount.

Image acquisition was with Maxim DL limited edition.

Post processing was done with with Nebulosity, Deepsky Stacker, Pixinsight LE, and Photoshop Elements.



M31 taken on my driveway in Alpharetta on September 12. 6 x 5 minute subs = 30 minutes.



M33 taken at the Deerlick Astronomy Village on Sept. 4. 9 x 5 minute subs = 45 minutes.

Right: NGC6992 (The eastern portion of the Veil Nebula) taken from my driveway in Alpharetta on July 10. 24X5 minute subs = 2 hours.



NGC7331 (The Deerlick Group) taken from the Deerlick Astronomy Village on Sept. 4. 24 x 5 minute subs = 2 hours.



NGC7023 (the Iris Nebula) taken on my driveway in Alpharetta Sept. 6 and 7. 39 x 5 minute subs = 3 hours and 15 minutes.



The AAC at Dragon*Con

Members of the Atlanta Astronomy Club set up telescopes near the pool at the Hilton Hotel on Friday and Saturday nights of Labor Day weekend to show attendees of Dragon*Con the night sky. Members present included Daniel Herron, Keith Burns, Kat Sarbell, Tom Faber, and Dan and Kelly Llewellyn. Here are a few photos from the event.



One of the visitors who looked at Jupiter in Daniel's telescope. Would you tell this guy that he couldn't look through your telescope???

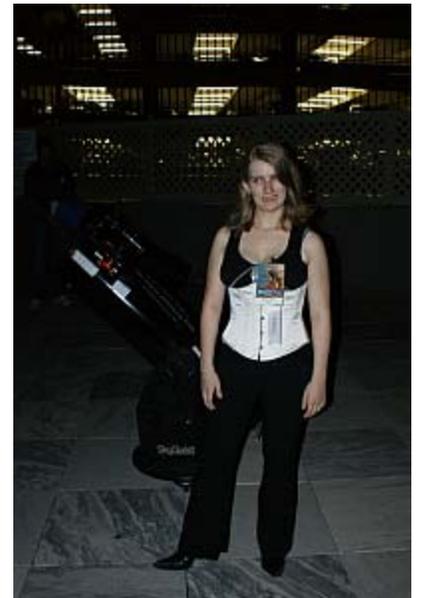
Photo by Daniel Herron.

Below: Another visitor who looked at Jupiter through Daniel's telescope. Photo by Daniel Herron.

Photo Top Left: Keith tries to get Jupiter in his scope even though it hasn't cleared the pool fence yet. Photo by Tom Faber.

Photo Middle Left: Visitors view Jupiter (visible between the light poles) through Kat's Astroscan and Keith's and Daniel's 10-inch Dobs. Photo by Tom Faber.

Photo Bottom Left: Dan Llewellyn (looking through the eyepiece) and Keith collimate Keith's scope. Photo by Tom Faber.



Daniel Herron with Brent (Mr. Data) Spiner. Photo by Daniel Herron.

Upcoming events at Tellus Museum

By Keith Burns, A-V Coordinator

Tellus Northwest Georgia Science Museum astronomer David Dundee contacted me recently about some upcoming events that will be held at Tellus. He is requesting help from us for members to bring telescopes to Tellus for public viewing. The dates and activities are the following:

October 15th and November 5th are Observatory Workshop Nights. What is the Observatory Workshop Nights? Tellus members sign up for an astronomy program in advance that teaches certain aspects of astronomy to those who attend the workshop. We are helping out by answering questions and providing folks views of certain objects through our telescopes. The amateur astronomers man one of 4 stations setup on the Tellus property. Only a few scopes and people are needed as only about 120 people total broken up into groups of 40 people will attend each workshop.

November 12 is family Science Night at Tellus and they anticipate big crowds so if anyone who can help by bringing their telescope it would be greatly appreciated. The viewing runs from 5PM until 11PM.



The night of December 20-21 is the night of a total lunar eclipse. We need as many telescopes as possible for lunar viewing from about 1AM until about 5AM. David plans to broadcast an image of the Moon into the museum live from their observatory and have viewing with the 20" telescope. They might have a few thousand people show up, so club members presence would be a huge help.

If you can help out at one or all of these events, please contact me and let me know. You can contact me at Keith_b@bellsouth.net or phone 678-229-7250. Thanks!

Roger's Field at Mentone Update

Keith Burns was recently contacted by Stan Dowiat, son of the late Roger Dowiat of Mentone, Alabama. Stan said the field has been cleared of all the fallen trees from the March tornado that hit the area. The debris has been removed and the utilities fully restored. So if you want to go on over there for observing, please contact Keith at Keith_B@bellsouth.net.

Voyager Mission History Online

Back in the days before the Internet became wide spread status updates about many space missions were distributed by mailed news bulletins. The Jet Propulsion Laboratory (JPL) published such a news letter about the Voyager Mission from 1977 to 1990. This news letter ran 99 issues, covering the time from before their launch until after Voyager 1 made its famous "Solar System Portrait" in 1990. I (Tom Faber) was on the mailing list for these bulletins. I keep my issues all this time and a few months ago I searched for them on line, but didn't find them. So I scanned my copies, made PDFs, and sent the files to Emily Lakdawalla of the Planetary Society. The Planetary Society is hosting these documents online and making them available for download. So if you are interesting in reading about the Voyager Mission "as it happened" check out this link: <http://www.planetary.org/explore/topics/voyager/msb.html>



Credit: NASA, ESA, and the Hubble Heritage Team (STScI/AURA) - HST ACS/WFC - WFPC2 - STScI-PRC10-24

"Island Universe" in the Coma Cluster

STScI News Release August 10, 2010

A long-exposure Hubble Space Telescope image shows a majestic face-on spiral galaxy located deep within the Coma Cluster of galaxies, which lies 320 million light-years away in the northern constellation Coma Berenices.

The galaxy, known as NGC 4911, contains rich lanes of dust and gas near its center. These are silhouetted against glowing newborn star clusters and iridescent pink clouds of hydrogen, the existence of which indicates ongoing star formation. Hubble has also captured the outer spiral arms of NGC 4911, along with thousands of other galaxies of varying sizes. The high resolution of Hubble's cameras, paired with considerably long exposures, made it possible to observe these faint details.

NGC 4911 and other spirals near the center of the cluster are being transformed by the gravitational tug of their neighbors. In the case of NGC 4911, wispy arcs of the galaxy's outer spiral arms are being pulled and distorted by forces from a companion galaxy (NGC 4911A), to the upper right. The resultant stripped material will eventually be dispersed throughout the core of the Coma Cluster, where it will fuel the intergalactic populations of stars and star clusters.

The Coma Cluster is home to almost 1,000 galaxies, making it one of the densest collections of galaxies in the nearby universe. It continues to transform galaxies at the present epoch, due to the interactions of close-proximity galaxy systems within the dense cluster. Vigorous star formation is triggered in such collisions.

Galaxies in this cluster are so densely packed that they undergo frequent interactions and collisions. When galaxies of nearly equal masses merge, they form elliptical galaxies. Merging is more likely to occur in the center of the cluster where the density of galaxies is higher, giving rise to more elliptical galaxies.

This natural-color Hubble image, which combines data obtained in 2006, 2007, and 2009 from the Wide Field and of Survey Camera 2 and the Advanced Camera for Surveys, required 28 hours of exposure time.

Parking News Update at Emory University

The parking deck behind the admissions building is now open for parking. So those of you who have been walking from either the Peavine or Fishburne parking decks will not have to do that anymore. Plus they are opening a new Barnes and Noble and other shops on the top floor. So there will be a few things to do while waiting for the meeting to start. This new facility and parking area is located next to the Math and Science Building and directly behind the Admissions building. Math and Science Building is directly across the street from our usual meeting place.

Georgia Astronomy in State Parks

There is one GASP event remaining for this year:

Nov 13 - Red Top Mtn SP.

For more information about these events, contact Keith Burns at 770-427-1475 or Keith_B@bellsouth.net.



The GASP volunteers at FDR State Park on Labor Day weekend 2004 - From left to right: Joanne Cirincione, Keith Burns, Harold and Claudia Champ with Ginger, Peter Macumber, Sharon Carruthers, Tom Faber, Kat Sarbell, and Holly and John Ritger. Photo by Holly Ritger.

Atlanta Astronomy Club Online

While this newsletter is the official information source for the Atlanta Astronomy Club, it is only up to date the day it is printed. So if you want more up to date information, go to our club's website. The website contains pictures, directions, membership applications, events updates and other information. <http://www.atlantaastronomy.org> You can also follow the AAC on Facebook by joining the AAC group, and on Twitter at <http://twitter.com/atlaastro>.

The **Atlanta Astronomy Club, Inc.**, the South's largest and oldest astronomical society, meets at **8:00 P.M.** on the Friday closest to full moon of each month at Emory University's White Hall or occasionally at other locations or times. Membership fees are **\$30 (\$35)** for a family or single person membership. College Students membership fee is **\$15 (\$20)**. These fees are for a one year membership (\$5 per year extra charge to receive the *Focal Point* mailed).

Magazine subscriptions to *Sky & Telescope* or *Astronomy* can be purchased through the club for a reduced rate. The fees are **\$33** for *Sky & Telescope* and **\$34** for *Astronomy*. Renewal forms will be sent to you by the magazines. Send the renewal form along with your check to the Atlanta Astronomy Club treasurer.

The Club address: Atlanta Astronomy Club, Inc., P.O. Box 76155, Atlanta, GA 30358-1155.

AAC Web Page: <http://www.AtlantaAstronomy.Org>. Send suggestions, comments, or ideas about the website to webmaster@AtlantaAstronomy.org. Also send information on upcoming observing events, meetings, and other events to the webmaster.

AAC Officers and Contacts

President: Mark Banks President@AtlantaAstronomy.org

Program Chair: Rich Jakiel Programs@AtlantaAstronomy.org

Observing Chair: Daniel Herron Observing@AtlantaAstronomy.org

Corresponding Secretary: Tom Faber

Focalpoint@AtlantaAstronomy.org

Treasurer: Sharon Carruthers Treasurer@AtlantaAstronomy.org

Recording Secretary: Julia Moore 678-531-2134

Secretary@AtlantaAstronomy.org

Board: Jim Moore - 678-598-5820 hollin@bellsouth.net

Board: Misty Herron - mistyherron@gmail.com

Board: Theo Ramakers 770-464-3777 director@ceastronomy.org

Board: Marie Lott mtlott@comcast.net

ALCOR: Art Zorka 404-633-8822 (H) 404-247-2474 (C)
artzorka@yahoo.com

Elliott Ch. Director: Theo Ramakers 770-464-3777
director@ceastronomy.org

Elliott Observing Supervisor: Steven Phillips 770-601-9816
observing@ceastronomy.org

Elliott Recording Secretary: Marie Lott mtlott@comcast.net

Elliott Coordinator: Alesia Rast Alesia_Rast@mail.dnr.state.ga.us

Elliott Webmaster: Larry Owens 678-234-5399
webmaster@CEastronomy.org

Georgia Astronomy in State Parks: Keith Burns 770-427-1475
Keith_B@bellsouth.net

Audio-Video Coordinator: Keith Burns 770-427-1475
Keith_B@bellsouth.net

PSSG Chairman: Peter Macumber pmacumber@nightsky.org

PSSG Co-Chair: Joanne Cirincione
starrynights@AtlantaAstronomy.org

Sidewalk Astronomy: Brad Isley
sidewalkastronomy@AtlantaAstronomy.org

Light Trespass: Open - Contact Mark Banks if you would like to volunteer for this position

Woodruff Observ. Coordinator: Sharon Carruthers
Treasurer@AtlantaAstronomy.org

AAC Webmaster: Daniel Herron observing@AtlantaAstronomy.org

Directions to White Hall at Emory

Our meetings are generally held in White Hall. To get to White Hall, turn onto Dowman Drive from North Decatur Rd at the five way intersection (across from Everybody's Pizza). White Hall is located across from the new Science & Math building. The best places to park are the Peavine and the Fishburne Parking Decks. The Fishburne deck is located on Fishburne Drive which is accessible from N. Decatur Rd. Turn onto Dowman and then right on Fishburne. You can also access Fishburne Drive from Clifton Road just north of N. Decatur. The Peavine parking deck is accessible from N. Decatur Rd. Turn onto Oxford Rd, go to the back entrance of Emory and turn onto Eagle Row. Take that to the Peavine deck. You can also access the Peavine deck from Clifton Rd. Turn onto Asbury Circle. It's the intersection next to the railroad tracks on Clifton. For maps to the decks see <http://map.emory.edu>. For more detailed directions to Emory University, visit www.atlantaastronomy.org or go to the Emory web site.

Calendar by Tom Faber (Times EDT/EST unless noted)

AAC Events are listed in BOLD

Oct 2nd, Saturday: **Charlie Elliott Chapter Meeting.**

October 3rd-10th: Peach State Star Gaze at DAV! See page 1 for info.

Oct 7th, Thursday: New Moon.

Oct 8th, Friday: Draconid Meteors.

Oct 9th, Saturday: Venus & Mars near the Moon.

Oct 14th, Thursday: Moon First Quarter.

Oct 16th, Saturday: Mercury Superior Conjunction.

Oct 22nd, Friday: **AAC Meeting at White Hall, Emory Univ, 8PM.** Orionid Meteors. Full Moon.

Oct 28th, Thursday: Venus at Inferior Conjunction.

Oct 29th, Friday: **November Focal Point Deadline.**

Oct 30th, Saturday: Moon Last Quarter.

Nov 5th, Friday: Taurids Meteors.

Nov 6th, Saturday: **Charlie Elliott Chapter Meeting.** New Moon.

Nov 7th, Sunday: Daylight Saving Time ends at 2AM. **BoD Meeting at 3PM - see pg 2.**

Nov 13th, Saturday: **GASP at Red Top Mountain State Park - see pg 7.** Moon First Quarter.

Nov 17th, Wednesday: Leonids Meteors.

Nov 19th, Friday: **AAC Meeting at White Hall, Emory Univ, 8PM.** Jupiter Stationary.

Nov 20th, Saturday: Mars near Mercury.

Nov 21st, Sunday: Full Moon.

Nov 28th, Sunday: Moon Last Quarter.

Dec 1st, Wednesday: Mercury at Greatest Elongation East.

Dec 4th, Saturday: **Charlie Elliott Chapter Meeting.** Venus at Greatest Brilliancy.

Dec 5th, Sunday: New Moon.

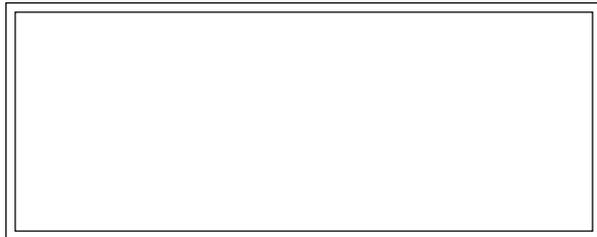
Dec 7th, Tuesday: Earliest Sunset in Atlanta: ~5:27PM.

Atlanta Astronomy Club Listserv

Subscribe to the Atlanta Astronomy Club Mailing List: The name of the list is: AstroAtlanta. The address for messages is: AstroAtlanta@yahoogroups.com . To add a subscription, send a message to: AstroAtlanta-subscribe@yahoogroups.com . This list is owned by Lemmy Abbey.

Focal Point Deadline and Submission Information

Please send articles, pictures, and drawings in electronic format on anything astronomy, space, or sky related to Tom Faber at focalpoint@atlaantastronomy.org. Please send images separate from articles, not embedded in them. Articles are preferred as plain text files but Word documents or PDFs are okay. You can submit articles anytime up to the deadline. **The deadline for November is Friday, Oct 29th at 6:00 PM. Submissions will not be accepted after the deadline.**



FIRST CLASS



We're here to help! Here's how to reach us:

Newsletter of The Atlanta Astronomy Club, Inc.



The Focal Point

Tom Faber
2206 Treeridge Parkway
Alpharetta, GA 30022

Atlanta Astronomy Club

P.O. Box 76155

Atlanta, GA 30358-1155

www.atlaantastronomy.org

On Twitter at <http://twitter.com/atlaastro>