

# The Focal Point

The Atlanta Astronomy Club  
Established 1947  
March 2009

Vol. 21 No. 10

Editor: Tom Faber

## Table of Contents

- Page 1**...March General Meeting, Renewal Info  
**Page 2**...February Meeting, Next BoD Meeting, Bradley Schedule  
**Page 3**...CE Meeting Minutes, Zombie Party, Comet Lulin Image  
**Page 4**...Suburban Astro Imaging  
**Page 5**...Cassini Maps Global Pattern of Titan's Dunes  
**Page 6**...Newfound Moon May Be Source of Outer Saturn Ring  
**Page 7**...GASP Info, Directions to White Hall, Web Site, Memberships, Club Officers & Contact Info  
**Page 8**...Calendar, AAC List Serve Info, Focal Point Deadline

## March General Meeting

by Keith Burns, AAC President

The March meeting of the Atlanta Astronomy Club will be held on Friday, March 13th. Meeting starts at 8PM. Location is White Hall on the Emory University Campus. Room 207. Directions to White Hall are at the bottom of this article. The meeting starts out with the monthly announcements power-point program that will run before the meeting starts and at the very beginning of the meeting. After that, we move on to our featured speaker of the night. Steve Bieger of the AAC and Fernbank will be giving a talk titled, "Galileo's Wonderful Universe." After the main talk is finished, we will hold our monthly business meeting. We may throw in a short program or two thrown in for good measure.

### The Program

Here is a description of Steve's presentation in his own words. "It follows the early development of The Scientific Revolution where the old ideas of the universe were turned upside down and made irrelevant, thus giving birth to the field of modern astronomy. "Galileo's Wonderful Universe" will be a chronology of the lives and science of five very famous people who, in their time, contributed to monumental leaps forward in human understanding and thus brought about what could truly be called a revolution."

### Speaker Biography

Here is Steve's biography. Steve is a Native of Atlanta and member of the AAC since 2001. He has a BSC degree in Physics from West Georgia College. My main activity outside of work for the last



## March is Membership Renewal Month

**MEMBERSHIP RENEWALS:** The AAC has moved to a "one-date-for-all" membership renewal. ALL CLUB MEMBERS, with some exceptions, should submit their \$30 (\$35 if you receive the mailed *Focal Point*) dues for 2009 by March 20th - The Vernal Equinox. (There will be an R1 in the upper right corner of your *Focal Point* label if you receive it in the mail. If you receive the *Focal Point* online you will receive an email - be sure we have your current email address). New members and those who have not yet paid their pro-rated dues, will receive a notice in their *Focal Point* stating the amount you owe to bring you in line with the March date. (There will be either an xxx or an RF on your label). If you have questions or concerns, please let the Treasurer (Sharon Carruthers) know.

8 years has been amateur astronomy. I've been a member of the Atlanta Astronomy Club since 2001 and I served three years as Observing Supervisor at one of the club chapters. I've been a volunteer at the Fernbank Science Center observatory in Decatur for 3 1/2 years. I've been a regular fixture there on Thursday evenings during that time. During the last year, I've been writing a two-part planetarium show to be run next year - Galileo's Wonderful Universe. The first program runs from March 5 to May 16, the second one will run in the fall.

### Directions to White Hall and Parking

Emory University is in the process of making improvements to the parking and roads. So for the next year, we will have to endure road construction plus the closing of some of our favorite parking spots. For now, the best places to park are the Peavine Parking Deck and the Fishburne Parking Deck. Fishburne Parking Deck is located on Fishburne Drive. When driving on North Decatur Rd, turn onto Dowman Drive (Dowman is now a one-way road into the campus now from North Decatur Road. Exit either by Oxford Road or Fishburne Drive) and then right on Fishburne Drive. You can also access Fishburne Drive from Clifton Road southbound on right before the N. Decatur Rd intersection. Note the Fishburne Parking deck is actually accessible from Fishburne Lane. When driving on Fishburne Drive, watch for the parking lot signs. The parking deck is located behind the Rich Building.

The Peavine parking deck is accessible from North Decatur Road. Take N. Decatur Rd to Oxford Road. Oxford is accessible from N. Decatur Road at two spots. If you are traveling east on North Decatur, then turn right onto Oxford. If traveling west, turn left onto Oxford. Take Oxford Road to the back entrance of Emory and turn onto Eagle Row. Take that to the Peavine parking deck. Note Peavine is across the street from the running track. You can also access Peavine from Clifton Road. Take Clifton south from Briarcliff Road. Turn right onto Asbury Circle. Asbury Circle changes names to Eagle Row. Parking deck will be on right side of road.

Directions to White Hall are on page 7. See the Emory web site for more details: [www.emory.edu](http://www.emory.edu)

*Continued on next page*

## Upcoming Meetings

April 3rd, 100 Hours of Astronomy program to take place at Bradley Observatory. A joint AAC and Agnes Scott College special night and program. Observing and Star Gazing music are the orders of business for that night.

May 8th, Dr. Chip West will talk about weather's impact on observing and tools you can use to help when deciding when to go out observing and when not to. We will also hold the club's yearly elections at this meeting.

## February Meeting Minutes

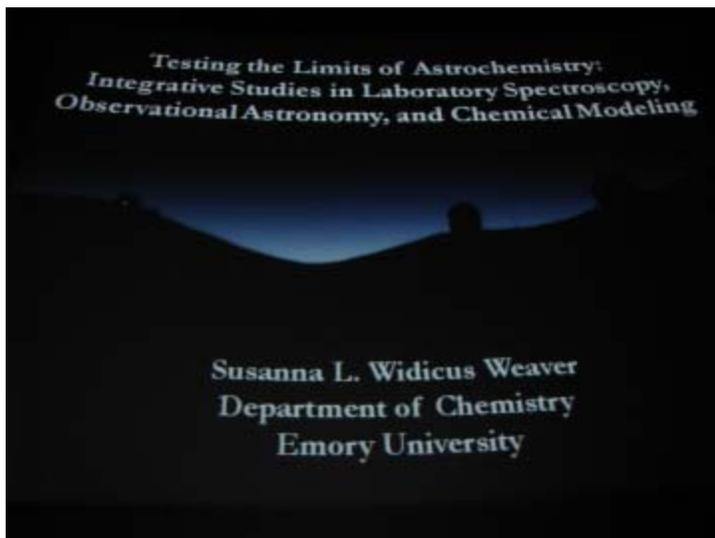
by Richard Jakiel, Recording Secretary

Meeting photos by Tom Faber

The February general meeting of the AAC was held on the 6th and started at 8:05 PM. Approximately 45 members and guests were in attendance. After a brief greeting and a few meeting notes, president Keith Burns introduced the evening's speaker - Dr. Susanna Widicus Weaver (photo below) of Emory University. Her talk dealt with the prediction, modeling, and observation the numerous molecules found in the interstellar medium (photo bottom). So far, this has been slow, tedious work concentrated on the well-known Orion and Sagittarius star forming regions. The standard "modus operandi" has been the extensive modeling/creation of molecular species in the laboratory, followed up by search time with microwave telescopes - often with mixed success. However, her lab is now working on new high sensitivity spectra techniques in the tera-hertz range. Combined with deep, whole-sky microwave mapping of the sky will greatly accelerate the mapping/detection of interstellar molecules.



After her talk, Keith discussed important upcoming club events. On February 21, the Charlie Elliot Chapter will have Dr. Julius Benton as guest speaker. He will be giving a talk on the observing the planet Saturn. Keith also brought up the GASP events for the next several months (see club calendar) and the various club observing events. The "no frills"



Zombie Party will be held at the AAC's DAV site on March 26 to 29th. The cost for the entire event is 20 dollars - whether you show up for one day or all three. Lastly, the next AAC Board of Directors meeting will be held at Emory on March 15th (*Editor's Note - Due to a scheduling conflict the location of the meeting is now TBD*). Details on this meeting forthcoming on the AAC's BoD list.

Following the meeting was the "after meeting" - food, drink and socializing at Athens Pizza.

## The Next AAC Board Meeting

by Don Hall, AAC Board Chair

The next Board Meeting of the Atlanta Astronomy Club is scheduled for Sunday, March 15th from 3PM to 5PM. Meeting location is TBD and will be announced on the Board list or contact Don Hall for information. The club still needs to fill the position of **Program Chair**. Those interested in this position should contact Keith Burns or Don Hall.

## Bradley Open House Series 2008-2009 "Astronomy Before Galileo"

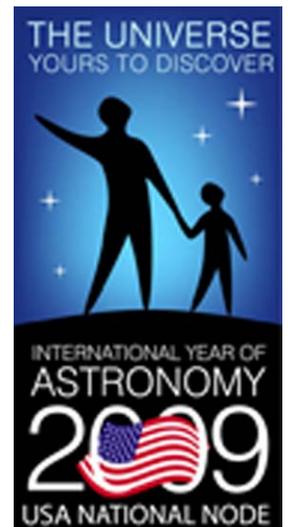
Humans have been gazing at the stars since they could look up, and have kept written records about motions in the heavens for millennia. This year, we will explore the rich history of astronomy and astronomical thought that predates Galileo. Our speakers will come from a variety of ancient disciplines including astronomy, architecture, classical studies, history and theology. All talks at 8PM unless noted. See <http://bradley.agnesscott.edu/> for more information.

### Spring 2009

March 20 - W. A. Calder Spring Equinox Concert & Open House

April 3 - "100 Hours of Astronomy" Celebration

May 8 - Bill Brown (Columbia Theological Seminary) - "The Heavens are Telling the Glory of God": The Cosmos According to Ancient Israel



# Charlie Elliot Chapter Meeting Minutes

by Ken Poshedly, CEWMA Chapter Recording Secretary

(Minutes have been edited for space constraints.)

The January 24th meeting was called to order at 3 p.m. by CE Chapter Director Theo Ramakers. The final attendance number was 19 members and guests present with 4 additional persons attending the post-meeting observing session. Following welcoming remarks by Theo was the featured presentation, "Meteorological factors affecting visibility", by Dr. Chip West (photo below), meteorologist in charge, Atlanta Center Weather



Photo by Larry Owens.

Service Unit, Atlanta Air Route Traffic Control Center in Hampton, Ga. Dr. West did a great job of tying together the relationships between cloud types and other atmospheric phenomena with how well or not the night sky will appear.

Following a short break for refreshments, Theo's "Current Events" PowerPoint segment included a great recap of:

- \* The recent Venus/Moon - Jupiter/Mercury conjunctions.
  - \* A list of CEWMA - IYA 2009 Outreach Program events where volunteers are needed
  - \* The CEWMA Volunteer Awards luncheon which Chapter Director Theo Ramakers and Chapter Observing Supervisor Jon Woods and their spouses attended.
  - \* A comparison of the 1969 Presidential Inauguration Parade which included an Apollo 7 float and the 2009 Presidential Inauguration Parade which included a prototype of NASA's Lunar Electric Rover.
  - \* An announcement of a request to extend the Space Shuttle Program.
  - \* Slides of the Constellation Program tests; this will be NASA's new generation of spacecraft that will carry humans to the Moon and Mars.
  - \* Slides of the Space Shuttle Discovery on its launchpad; STS-119 will fly the S6 truss segment and install the final set of power-generating solar arrays to the International Space Station.
  - \* Images of Saturn and Mars
  - \* Plans to modify the CEWMA web page
- Jon Wood's "Observing 101" PowerPoint segment included:
- \* Upcoming rise/transit/set times for celestial objects in the coming weeks.
  - \* An computer-generated image of a transit of Saturn by Titan.
  - \* An update on several comets.

Afterwards, Theo led discussion of several ideas to enhance the chapter's website.

CEWMA rep Alesia Rast announced that the chapter's observing field will be relocated across the road from its present site after logging operations have been completed no later than 18 months from now; the new observing field site will be within the "safe zone" and off-limits from hunters. Alesia also ask that all who volunteer at any CEWMA note their hours and inform Alesia. The meeting was adjourned at 5:45 p.m.

## Charlie Elliott Future Meetings

The Meeting dates for the Charlie Elliott Chapter have now been set for 2009. All meetings are on Saturdays: Mar 28, Apr 18, May 16 (JAKES Day), June 20, July 18, Aug 22, Sept 19, Oct 17, Nov 14, Dec 19. Please note that the March, June, September and December Meetings are our Pot Luck Dinner Meetings. For meeting updates and other information please check the CE chapter website: <http://www.CEastronomy.org>

Thanks and Clear Skies, Theo Ramakers.

## Zombie Star Party 2009

by Keith Burns, AAC President

The 2009 Spring Zombie Star Gaze will be run from Thursday afternoon March 26th through Sunday morning March 29th.

The location is Grier's Field at the Deerlick Astronomy Village. DAV is located off I-20 one hour west of Augusta. The field has power along the fence. There are also bathrooms and showers. The club has 30 x 18 building. There is a large pavilion located between the DAV field office and the bathrooms. Plus dark skies far from the light pollution of the Atlanta metro area. You can either tent camp or sleep in your vehicle.

The price is \$10 per day or \$20 for the entire event. There is no pre-registration. All you have to do is pay on site. The money goes toward improvements to the Gier's field site and help with improving the AAC property on site.

This is the best time of the year to observe all 110 Messier objects in the night sky in one night. Or in this case, you can do it over several nights.

For information, contact

Dave Lumpkin at [Observing@atlantaastronomy.org](mailto:Observing@atlantaastronomy.org) or Keith Burns at [President@atlantaastronomy.org](mailto:President@atlantaastronomy.org)

## Comet Lulin

by Richard Jakiel

Here's a composite image of Comet Lulin taken February 21 at around 2AM (7:00 UT). It is composed of 13 unguided images (out of 16 taken, 3 rejected in stacking) - thus the breaks in the trails. Imaging statistics: 80mm Vixen f/7.5 ED, 16 x 60 seconds, 1600 ISO - 350 XT Digital Rebel. Images were stacked tracking on the comet's nucleus.



## Suburban Astro Imaging

by Chuck Painter

I wanted to share with you the results of my imaging runs from last Wednesday and Thursday (January 21 & 22) at my suburban location in Alpharetta. Thanks to Keith Burns for help with setup and keeping me company. The images were taken with an 8-inch, F/10 Meade SCT on Atlas EQ-G mount with an Orion Starshoot Pro 6.1 Megapixel one shot color camera. I used an Orion ST80 with an Orion Starshoot autoguider for guiding.



*This photo by Keith Burns shows Chuck's imaging setup and some of the light pollution he has to deal with.*

I'm using a combination of Nebulosity, Images Plus, PixInsight LE (a freeware program from Spain) and Photoshop for processing. I've been doing imaging for about 4 weeks now and obviously there's still lots left to learn. Light pollution is obviously an issue for me and I have to work hard to extract the image from the background murk. However, the convenience factor of just carrying the equipment out to my driveway is pretty compelling. Now that I've worked out most of the operational kinks of the imaging process, I'm looking forward to getting to a dark site to see what can really be achieved.



M51 (The Whirlpool Galaxy) 12X5 = 60 minutes (01/21/09)



M81 (Spiral Galaxy) 12X5 = 60 minutes (01/21/09)

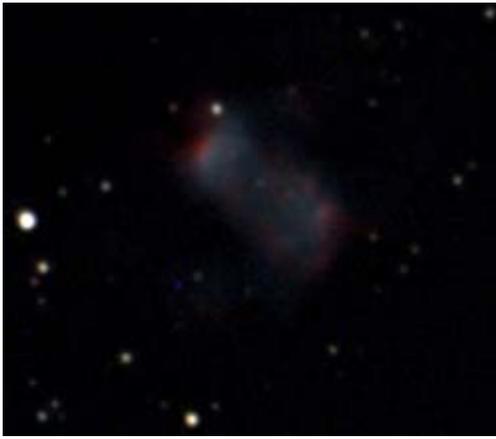


NGC1514 (Planetary Nebula) 6X5 = 30 minutes (01/22/09)



M1 (Crab Nebula) 8X5 = 40 minutes (01/21/09)

*Continued on next page*



M76 (the Little Dumbbell) 6X5 = 30 minutes (01/22/09)



NGC 2392 (the Eskimo Nebula) 3X5 = 15 minutes (01/22/09)

---

---

## Cassini Maps Global Pattern of Titan's Dunes

NASA/JPL News Release - February 26, 2009

Titan's vast dune fields, which may act like weather vanes to determine general wind direction on Saturn's biggest moon, have been mapped by scientists who compiled four years of radar data collected by the Cassini spacecraft (See image on next page).

Titan's rippled dunes are generally oriented east-west. Surprisingly, their orientation and characteristics indicate that near the surface, Titan's winds blow toward the east instead of toward the west. This means that Titan's surface winds blow opposite the direction suggested by previous global circulation models of Titan.

"At Titan there are very few clouds, so determining which way the wind blows is not an easy thing, but by tracking the direction in which Titan's sand dunes form, we get some insight into the global wind pattern," says Ralph Lorenz, Cassini radar scientist at Johns Hopkins University Applied Physics Laboratory in Laurel, Md. "Think of the dunes sort of like a weather vane, pointing us to the direction the winds are blowing." A paper based on these findings appeared in the Feb. 11 issue of *Geophysical Research Letters*.

"Titan's dunes are young, dynamic features that interact with topographic obstacles and give us clues about the wind regimes," said Jani Radebaugh, Brigham Young University, Provo, Utah. "Winds come at these dunes from at least a couple of different directions, but then combine to create the overall dune orientation."

The new map, based on all the high-resolution radar data collected during a four-year period, is now available at: <http://saturn.jpl.nasa.gov> and <http://www.nasa.gov/cassini>.

The wind pattern is important for planning future Titan explorations that might involve balloon-borne experiments.

Some 16,000 dune segments were mapped out from about 20 radar images, digitized and combined to produce the new map.

Titan's dunes are believed to be made up of hydrocarbon sand grains likely derived from organic chemicals in Titan's smoggy skies. The dunes wrap around high terrain, which provides some idea of their height. They accumulate near the equator, and may pile up there because drier conditions allow for easy transport of the particles by the wind. Titan's higher latitudes contain lakes and may be "wetter" with more liquid hydrocarbons, not ideal conditions for creating dunes.

Cassini, which launched in 1997 and is now in extended mission operations, continues to blaze its trail around the Saturn system and will visit Titan again on March 27. Seventeen Titan flybys are planned this year.



*This is a portion of a Cassini radar mapper image obtained by the Cassini spacecraft on its December 21, 2008, flyby of Saturn's moon Titan.*

*The area shown covers the southern boundary of an equatorial band where longitudinal dunes (dunes that form along the wind direction) are pervasive. Here the dunes are apparently created by winds locally coming from the west and north-west, and generally blowing toward the east. The dunes are interspersed with radar-bright features that are inferred to rise above the surrounding terrain.*

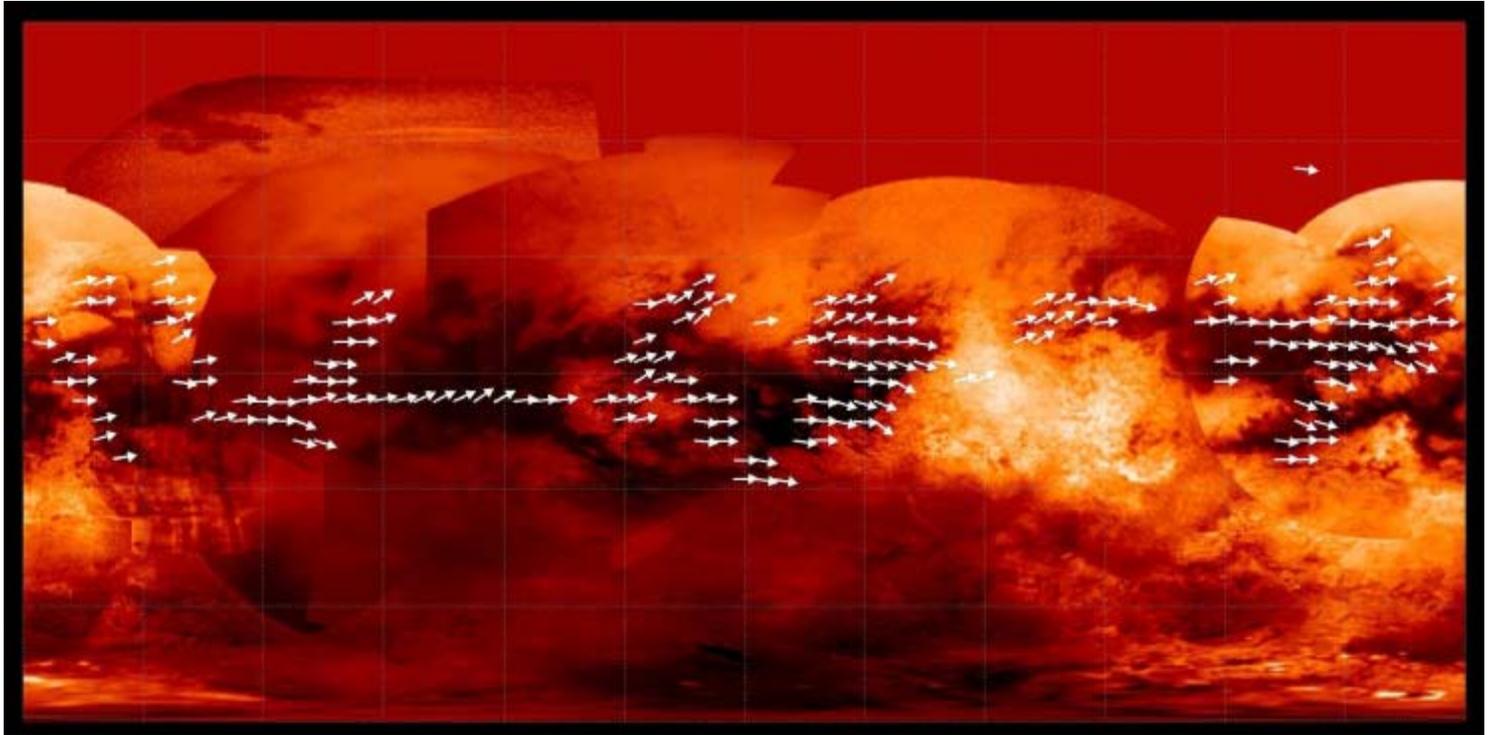
*In the lower part of the image there are no dunes at all, and the texture is more typical of featureless plains observed in many other areas of Titan that lack dunes. In this transition zone, the sand-sized particles that make up the dunes might not be so plentiful. In this case, insufficient sand to*

*Continued on next page*

replenish the dunes makes them gradually disappear. Compare the nature of these dunes to those seen at the northern boundary of the dune fields observed in radar images obtained during the T3 flyby on Feb. 15, 2005 (See Cat Scratches).

The image is centered near 19.2 degrees south and 257.4 degrees west. It covers an area of 220 kilometers (137 miles) by 170 kilometers (106 miles). North is approximately toward the top of the image, the radar illumination is from the right, and the incidence angle is about 25 degrees. The vertical stripe across the image at its center is an artifact in this preliminary version.

**Image Below:** Scientists have used data from the Cassini radar mapper to map the global wind pattern on Saturn's moon Titan using data collected over a four-year period, as depicted in this image. The arrows indicate the direction in which sand is inferred to be transported along dunes observed in Titan radar data. Underlying the arrows is a base map from Cassini's imaging science subsystem. Many of the equatorial dark areas without arrows might have dunes but have not yet been imaged with radar. The dune orientations represent only the net effect of winds. It could be that sand transport only occurs on rare occasions, and winds from different directions can combine to yield the observed dune orientations.



## Newfound Moon May Be Source of Outer Saturn Ring

NASA/JPL News Release - March 03, 2009

NASA's Cassini spacecraft has found within Saturn's G ring an embedded moonlet that appears as a faint, moving pinprick of light. Scientists believe it is a main source of the G ring and its single ring arc.

Cassini imaging scientists analyzing images acquired over the course of about 600 days found the tiny moonlet, half a kilometer (about a third of a mile) across, embedded within a partial ring, or ring arc, previously found by Cassini in Saturn's tenuous G ring.

"Before Cassini, the G ring was the only dusty ring that was not clearly associated with a known moon, which made it odd," said Matthew Hedman, a Cassini imaging team associate at Cornell University in Ithaca, N.Y. "The discovery of this moonlet, together with other Cassini data, should help us make sense of this previously mysterious ring."

Saturn's rings were named in the order they were discovered. Working outward they are: D, C, B, A, F, G and E. The G ring is one of the outer diffuse rings. Within the faint G ring there is a relatively bright and narrow, 250-kilometer-wide (150-miles) arc of ring material, which extends 150,000 kilometers (90,000 miles), or one-sixth of the way around the ring's circumference. The moonlet moves within this ring arc. Previous Cassini plasma and dust measurements indicated that this partial ring may be produced from relatively large, icy particles embedded within the arc, such as this moonlet.

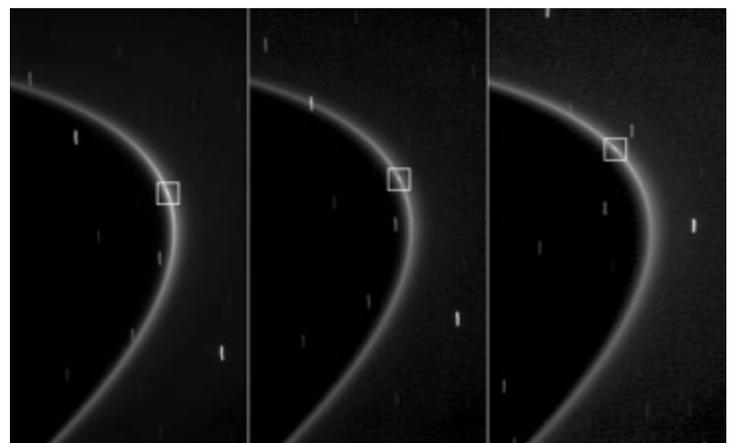
Scientists imaged the moonlet on Aug. 15, 2008, and then they confirmed its presence by finding it in two earlier images. They have since seen the moonlet on multiple occasions, most recently on Feb. 20, 2009. The moonlet is too small to be resolved by Cassini's cameras, so its size cannot be

measured directly. However, Cassini scientists estimated the moonlet's size by comparing its brightness to another small Saturnian moon, Pallene.

Hedman and his collaborators also have found that the moonlet's orbit is being disturbed by the larger, nearby moon Mimas, which is responsible for keeping the ring arc together.

This brings the number of Saturnian ring arcs with embedded moonlets found by Cassini to three. The new moonlet may not be alone in the G ring arc.

*Continued on next page*



This sequence of three images, obtained by NASA's Cassini spacecraft over the course of about 10 minutes, shows the path of a newly found moonlet in a bright arc of Saturn's faint G ring. Image credit: NASA/JPL/Space Science Institute.

Previous measurements with other Cassini instruments implied the existence of a population of particles, possibly ranging in size from 1 to 100 meters across. "Meteoroid impacts into, and collisions among, these bodies and the moonlet could liberate dust to form the arc," said Hedman.

Carl Murray, a Cassini imaging team member and professor at Queen Mary, University of London, said, "The moon's discovery and the disturbance of its trajectory by the neighboring moon Mimas highlight the close association between moons and rings that we see throughout the Saturn system. Hopefully, we will learn in the future more about how such arcs form and interact with their parent bodies."

Early next year, Cassini's camera will take a closer look at the arc and the moonlet. The Cassini Equinox mission, an extension of the original four-year mission, is expected to continue until fall of 2010.

## Georgia Astronomy in State Parks

The following GASP events are currently scheduled:

**March 21** - Unicoi State Park.

**June 13** - Tugaloo State Park.

**August 15** - Buck Shoals State Park.

**November 14** - Red Top Mountain State Park.

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 Website

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 (when available) and other information. <http://www.atlantaastronomy.org>

The **Atlanta Astronomy Club, Inc.**, the South's largest and oldest astronomical society, meets at **8:00 P.M.** on the third Friday of each month at Emory University's White Hall or occasionally at other locations or times. Membership is open to all. 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](mailto:webmaster@AtlantaAstronomy.org). Also send information on upcoming observing events, meetings, and other events to the webmaster.

## AAC Officers and Contacts

**President:** Keith Burns 770-427-1475 Keith\_B@bellsouth.net

**Program Chair:** Position Open - [programs@atlantaastronomy.org](mailto:programs@atlantaastronomy.org)

**Observing Chair:** Dave Lumpkin [observing@atlantaastronomy.org](mailto:observing@atlantaastronomy.org)

**Corresponding Secretary:** Tom Faber 770-642-4865  
[focalpoint@atlantaastronomy.org](mailto:focalpoint@atlantaastronomy.org)

**Treasurer:** Sharon Carruthers [Treasurer@AtlantaAstronomy.org](mailto:Treasurer@AtlantaAstronomy.org)

**Recording Secretary:** Rich Jakiel [Secretary@atlantaastronomy.org](mailto:Secretary@atlantaastronomy.org)

**Board Chair:** Don Hall - [donrhall@bellsouth.net](mailto:donrhall@bellsouth.net)

**Board:** Mark Banks - Contact Info TBA

**Board:** William Brannet - Contact Info TBA

**Board:** Marie Lott 770-496-5774 [mtlott@comcast.net](mailto:mtlott@comcast.net)

**Board:** Daniel Herron - Contact Info TBA

**ALCOR:** Art Zorka 404-633-8822 (H) 404-824-7106 (C)  
[star.myth@juno.com](mailto:star.myth@juno.com)

**Elliott Ch. Director:** Theo Ramakers 770-464-3777  
[ramakers@bellsouth.net](mailto:ramakers@bellsouth.net)

**Elliott Observing Supervisor:** Jonathan Wood 404-374-8750  
[observing@ceastronomy.org](mailto:observing@ceastronomy.org)

**Elliott Recording Secretary:** Ken Poshedly 678-516-1366  
[poshedly@bellsouth.net](mailto:poshedly@bellsouth.net)

**Elliott Coordinator:** Alesia Rast [Alesia\\_Rast@mail.dnr.state.ga.us](mailto:Alesia_Rast@mail.dnr.state.ga.us)

**Elliott Webmaster:** Larry Owens 678-234-5399  
[webmaster@CEastronomy.org](mailto:webmaster@CEastronomy.org)

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

**Light Trespass:** Open - Contact Keith Burns if you would like to volunteer.

**PSSG Chairman:** Peter Macumber [pmacumber@nightsky.org](mailto:pmacumber@nightsky.org)

**PSSG Co-Chair:** Joanne Cirincione  
[starrynights@AtlantaAstronomy.org](mailto:starrynights@AtlantaAstronomy.org)

**Sidewalk Astronomy:** Brad Isley  
[sidewalkastronomy@atlantaastronomy.com](mailto:sidewalkastronomy@atlantaastronomy.com)

**Woodruff Observ. Coordinator:** Sharon Carruthers  
[Treasurer@AtlantaAstronomy.org](mailto:Treasurer@AtlantaAstronomy.org)

**Webmaster Atlanta Astronomy:** Peter Macumber 770-941-4640  
[pmacumber@nightsky.org](mailto:pmacumber@nightsky.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](http://www.atlantaastronomy.org) or go to the Emory web site.

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

- March 4th, Wednesday: Moon First Quarter.  
March 8th, Sunday: Saturn Opposition. Daylight Saving Time begins 2AM.  
March 10th, Tuesday: Full Moon.  
March 13th, Friday: **AAC Meeting at White Hall, 8PM, Emory University.**  
March 15th, Sunday: **AAC BoD Meeting, 3PM, Emory University - See pg 2.**  
March 18th, Wednesday: Moon Last Quarter.  
March 19th, Thursday: **April Focal Point Deadline.**  
March 20th, Friday: Equinox at 7:45AM. Equinox Concert at Bradley - See pg 3 for details.  
March 21st, Saturday: **GASP at Unicoi State Park - See pg 7 for details.**  
March 26th, Thursday: New Moon.  
March 26th-29th: **Zombie Party at DAV - Contact David Lumpkin for details.**  
March 27th, Friday: Venus Inferior Conjunction.  
March 28th, Saturday: **CEC Meeting - See pg 3 for details.**  
March 30th, Monday: Mercury Superior Conjunction.  
April 2nd, Thursday: Moon First Quarter.  
April 3rd, Friday: **AAC/Bradley 100 Hrs of Astronomy Event at Bradley Observatory.**  
April 9th, Thursday: Full Moon.  
April 17th, Friday: **May Focal Point Deadline.** Moon Last Quarter.  
April 18th, Saturday: **CEC Meeting - See pg 3 for details.**  
April 19th, Sunday: Moon near Jupiter.  
April 22nd, Wednesday: Moon near Venus.  
April 23rd, Thursday: Lyrid Meteors.  
April 24th, Friday: New Moon.  
April 26th, Sunday: Mercury at Greatest Elongation East. Moon near M45.  
May 1st, Friday: Moon First Quarter.  
May 2nd, Saturday: Venus at Greatest Brilliancy.

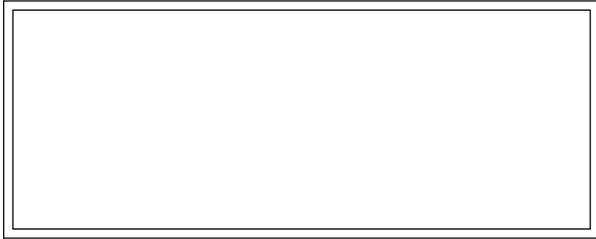
## Atlanta Astronomy Club Listserv

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 Lenny 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@atlantaastronomy.org. Please send images separate from articles, not embedded in them. Articles are preferred as plain text files but Word documents are okay. You can submit articles anytime up to the deadline. **The deadline for April is Thursday, March 19th at 4:00 PM. Submissions will not be accepted after the deadline.**

FIRST CLASS



*The Focal Point*

Newsletter of The Atlanta Astronomy Club, Inc.

FROM:

Tom Faber

2206 Tretridge Parkway

Alpharetta, GA 30022

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



Atlanta Astronomy Club

P.O. Box 76155

Atlanta, GA 30358-1155

www.atlantaastronomy.org