

The Focal Point

The Atlanta Astronomy Club
Established 1947
May 2005

Vol XVII No. 12

Editor: Kat Sarbell

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May General Membership Meeting

The meeting will take place on Friday, May 20th at White Hall at Emory University. Please join us for refreshments from 7:30-7:55 PM. The meeting will start at 8:00 PM. Elections will take place at this meeting. Read the minutes for the April meeting in this issue on page 2 to review the panel of candidates. See page 7 for directions to White Hall.

In addition to the elections, we will have a guest speaker this month. Our speaker will be Charles Osborne, Technical Director of the Pisgah Astronomical Research Institute (PARI). Mr. Osborne has been involved in the Society of Amateur Radio Astronomers for almost twelve years. He has been an officer since 1996 and President since 2002. Mr. Osborne has a degree in Electrical Engineering from NC State University.

He has been involved with PARI since its founding in 1999. In addition to astronomy and electronics, he has a wide range of interests including flying, painting, woodworking, metalwork, reading science fact and fiction, computers, rock and gemstone collecting, seismology, archaeology and natural history.

PARI is a not-for-profit 501(c)3 public foundation founded in February of 1999 for the purpose of providing access to optical and radio astronomy facilities for a broad cross section of users. The vision is to use the facility once known as the Rosman Research Station, as the basis of a radio and optical astronomy observatory for Universities and Community Colleges through out the southeast. In addition, K-12 students are contacted via various outreach and Internet based activities such as the 4.6m radio telescope named "Smiley" or the StarLab planetarium.

PARI acquired the 202 acre Rosman Research Station from the US Forest Service. The site was originally constructed in 1962 by NASA as a key facility in the manned spaceflight program.

For more information see <http://www.pari.edu/>

Hubble's 15th Anniversary Images

by Tom Faber

On April 25th two spectacular new Hubble Space Telescope images were released to commemorate the 15th anniversary of the launch of the orbiting observatory. These images were unveiled at 100 facilities across the country. One of only two in Georgia was Bradley Observatory at Agnes Scott College.

At Bradley the release was hosted by Drs. Chris DePree (below right) and Amy Lovell. About 30 people attended the event. Chris made some opening remarks and then gave a brief history of what led to the development of the HST. He then showed a short DVD that presented the deployment of the HST by the Space Shuttle in 1990, the 1993 servicing mission that installed the corrective optics and upgraded other equipment, and the three subsequent servicing missions.

Afterwards were the unveilings of the poster sized images of the Whirlpool Galaxy (M51, bottom left) and a portion of the Eagle Nebula (M16, bottom right), both taken with Hubble's Advanced Camera for Surveys, which was installed during the most recent servicing mission in 2002.

The M51 image, about 6 ft by 4 ft, was really stunning showing the spiral arms loaded with young OB associations, HII regions, and dust clouds, and the core glowing in yellow with the light of older stars. Its interacting companion galaxy, NGC 5195, also glowed yellow. In the background sky there were dozens of distant galaxies including a ring galaxy!

The Eagle image was about 6 ft tall by 3 ft wide and showed a nine light year long molecular cloud in a different part of the Eagle Nebula than the famous "Pillars of Creation" image taken by Hubble in 1995.

Chris and Amy answered many questions about the images and then a video was shown in the planetarium that highlighted many of the discoveries made by Hubble, from our solar system to the edge



Photo by Art Zorka



of the universe. Refreshments were served and tours of the Beck Telescope by some of the Agnes Scott astronomy students capped off the event.

For those who couldn't attend, the images are available at: <http://hubblesite.org/newscenter/newsdesk/archive/releases/2005/12/> but seeing them on a 21-inch monitor doesn't do justice to the amazing images presented today. (Below: Dr. Lovell unveils the image of M51.)



Photo by Art Zorka

AAC April Meeting Minutes

The AAC General Membership Meeting took place Friday April 15th at 8 PM at White Hall at Emory University. Forty-eight people were in attendance. Club president Chuck Painter opened the meeting. He asked a trivia question about the recent solar eclipse and gave away two coffee mugs to visitors who answered the question correctly. Chuck announced that elections were going to occur at the next meeting, and club member and former president Jim Moore pointed out that, according to the club's bylaws, the floor had to be opened for nominations. A partial slate of candidates was announced by Chuck: Observing Chairman: Dan Herron, Treasurer: Sharon Carruthers, Corresponding Secretary: Kat Sarbell, Board: Ken Posedly and Art Zorka. (Mike Boni, Brigitte Fessele, and Mark Banks are ending their board terms this year; Tom Faber, Donovan Conrad, and Chris Hetledge are remaining in their board positions for another year.) If you are interesting in running for an office or board position, contact Keith Burns. Daniel Herron presented upcoming events, and Larry Owens announced that elections are also coming up for the Charlie Elliott Chapter. The club was then treated to a special story: Art Zorka presented the telescope that his granddaughter Isabella made out of a binocular lens passed on from Art Russell. Phil Sacco, the club's SERAL rep, presented the Lunar Club award to Daniel Herron. Nancy Berninger, board chairman, then introduced our new Light Trespass officer, Mark Sandburg. Mark had prepared a slide show on Light Pollution. Keith Burns, Club Mentor, then presented his slide show on double stars. After the meeting, many club members walked over to the open house at the Emory Math & Science building across the street. (As of press time, additional candidates have volunteered for the following positions: President: Mark Banks & Jim Moore; and Board: Larry Owens.)

Charlie Elliott April Meeting Minutes

by Clevis Jones

Attendance: Thirteen members and guests.

Business: Larry Owens, Chapter Director, talked about the Byers Mount circuitry donated by Michael Covington. Ken Posedly has donated pictures for the CEC Web site Astro Imager section.

There are three requests for volunteers:

1. April 15th an administrator for a school needs volunteers to show the

night sky to two students: Debbie & Clevis Jones will cover it.

2. The Charlie Elliott Summer Camp has three sessions for which they need an astronomy program: Jim Honeycutt will present the program one time during each of the weeks of June 6-13, June 20-24, and July 18-22. If anyone would like to help Jim, please contact Larry Owens at planetographer@comcast.net.

3. **The May meeting is election of officers: Director, Observing Supervisor and Recording Secretary are all open for nomination.**

Larry Owens is a nominee for Director; Clevis Jones for Recording Secretary. **Members, please attend the May meeting, submit nominees, and VOTE.** If you are a member of CEC or AAC, and would like to run for office, please contact Larry Owens at the above address and we'll get a broadcast message out to everyone.

Current Events Report: Clevis Jones covered Hubble, Mars Rovers, Jupiter, partial eclipse, STS-114, and the results of the highly successful Hightower Trail Elementary event. Thanks to volunteers Lou Aull, Daniel Herron, Terry Heaton, Steve Kennedy, and Debbie and Clevis Jones.

Observing Report – What's UP Tonight: Debbie Jones covered the highlights for the sky that night.

Featured Program: Jim Honeycutt, teacher for 33 years and currently at Oxford College of Emory University presented a program entitled "This is Your Life"; a 105 slide program that covered the many aspects of the birth, life, and death of stars.

Observing Session: Cloudy skies cleared in time for the observing session following the meeting.

Charles Elliott Chapter Future Meetings

by Clevis Jones

All meetings are held at the Charlie Elliott Visitor's Center classroom, unless otherwise posted. Enter through the left side door nearest the back of the building.

Meeting Dates and Programs:

May 7, 2005, at 5:00 PM

Officer Elections: Consider volunteering to serve the Charlie Elliott Chapter as an officer. Director, Recording Secretary, and Observing Supervisor are all elected positions with a term of one year. Volunteer, nominate and vote for your favorite officer at this month's meeting.

- General Meeting Open To The Public

- Current Events: Larry Owens

- What's Up Tonight: Observing report by Debbie Jones

- Feature Presentation: "The Search for Life in the Universe": Long time chapter member Dr. Bill Snyder will present a program on the search for life in the Universe. Please join Bill for an interesting and thought provoking presentation – everyone is welcome!

June 4, 2005, at 5:00 PM

- General meeting open to the public.

- Astronomy Current Events: TBD

- What's up Tonight: TBD

- Feature presentation: "CCD Imaging" by Jerry Armstrong lecture. The celebrated "Space Artist", comet hunter, and supernova discoverer, Jerry Armstrong will present a program showcasing his CCD images and perhaps a discovery story or two. Jerry has been an amateur astronomer and imager for many years, retired from the Cobb County Fire Department and is a Vietnam veteran. Please join Jerry and the Charlie Elliott chapter for an entertaining evening of astronomy - everyone is welcome!

For updates, please check the CEC website for the most current meeting information - <http://www.atlantaastronomy.org/CEWMA/>



Astronomy Day at Fernbank

On Saturday, April 16th, Fernbank Science Center hosted an Astronomy Day celebration. Many club members, including Michael Smith, Daniel Herron, Tom Crowley, and Keith Burns, assisted the Fernbank staff during the event and set up telescopes for visitors to enjoy solar viewing.

All photos by Keith Burns.



The 2005 Spring Zombie Party

by Daniel Herron

Well what can I say about the Zombie Party? Let me give you a day by day account and let you decide!

Wednesday Night

I arrived around 7:30pm. Michael Smith was already there. I got my tent setup, and since it was raining a little and there were no chance of clear skies we decided to watch "The Incredibles" in the warm-up shed and then called it a night!

Thursday

We were both up by 10 and ate breakfast. During the day we talked and showed each other our different software packages and star guides. We went through our star atlases and drew in most of the constellations (this helps a lot). Around 4PM I left to go to Wal-Mart to get a few things. On the way the bottom dropped out of the clouds. I was going about 20 miles an hour most of the way to Ellijay. More of the same on the way back. When I got back around 6:30 the field was soaked as well as most the stuff in our tents. We got soaked as we fixed our tent so the soaked seams would not drip water into our tents. By then it was getting dark so we watched "Shrek" and called it a night.

Friday

Finally on Friday a few more people showed. Not that I was getting tired of Michael, it was just nice to finally have people start showing up for the event. Alex Langoussis, Chuck Painter, Steven Bieger, Bob Holzer, and Chuck Swann all came out on Friday. We had a really strong storm roll through about an hour after the eclipse (which we saw about 15 minutes of) but the skies soon cleared and despite a swishy wet field we got some observing done. We had nice skies until around 1AM Saturday morning. M51 looked amazing through Alex's 24-inch Dob!

Saturday

A few more people showed up on Saturday. My wife, Misty, joined us as the only representative of the club's female population present for the event. John Ball, John and Fred Fox, John Lentini,

and Jim Stratigos, all arrived Saturday afternoon. We got a few more members trained on the club's 24-inch scope. John and Alex cleaned the primary. We also worked on the encoders for the 24's Sky Commander since it was not reading the Azimuth encoder. We removed the encoder and are in the process of replacing it. Saturday night was the opposite of Friday. It looked promising all day but got cloudy as night approached. The cloud would move through and occasionally open a hole for us to view a little. From 10:30 to 11 was pretty clear and then it got cloudy again until early Sunday morning, around 1-2AM.

All in all a good event. Weather could have been better but the company was great and we had a real good time! Thanks to all those who came out!

Special Thanks to Chuck Painter, Steven Beiger, and Michael Smith who helped organize the event, and to John Lentini and Alex Langoussis who cleaned the Primary on the 24-inch and helped with the cleanup Sunday morning.



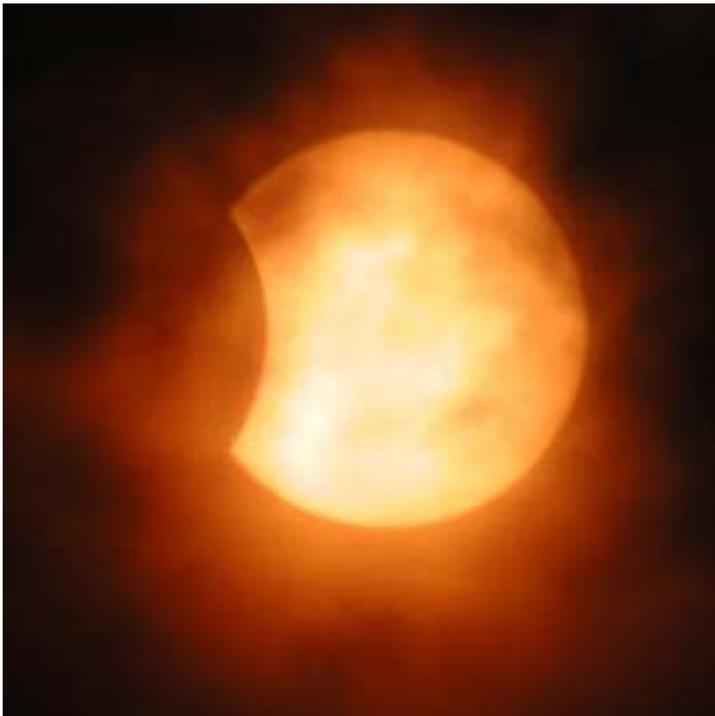
Above: Michael Smith's equipment setup in front of the warm-up shed. Below: A view of the field as campers were setting up for the Zombie party. Photos by Michael Smith.



April's Partial Solar Eclipse



A partial solar eclipse occurred April 8th. Club member Frank Marchese managed to capture these eclipse images (left and below) through some “sucker holes” in the clouds near his home in Grayson.



Keith Burns gets set up to image the partial eclipse with his digital camera and Astroscan at “Stooges Field” in Douglasville. The skies there cleared just in time for Rich Jakiel to capture the image below.



"Space Camp" at Hightower Trail Elementary in Conyers, GA

by Clevis Jones

Hightower Trail Elementary in Conyers, GA presented Space Camp to their 4th grade class on the evening of Friday, March 25, 2005 and invited volunteers from CEC/AAC to be a part of the program by bringing telescopes for the children to view through.



Six volunteers - Lou Aull, Terry Heaton, Daniel Herron, Steve Kennedy, Debbie and Clevis Jones - set up six telescopes on a gorgeous spring evening.

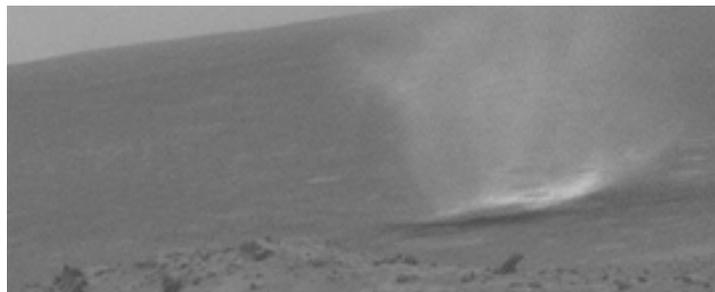
About ninety 4th graders and their teachers rotated in groups of 20+ through the various Space Camp programs the school had set up. All those people rotated through the telescopes, twice. The children got to see the Moon, Saturn, Jupiter, and the Orion Nebula through some very fine telescopes which ranged in size from a 4.5 inch refractor to a 10 inch reflector. Each volunteer told the children a little about what they were looking at. All the children were told about constellations, with the focus being on the asterisms of Orion and the Big Dipper. In addition, the ISS, big and bright, made a fly by for one of the groups! Thanks to the students of Hightower Trail Elementary for making the volunteers feel so welcome. Your interest and excitement at what you were seeing made the volunteers' efforts very worthwhile and satisfying. All the volunteers had a very good time.

At the end of the evening, all ninety of the Hightower Trail 4th grade Space Camp got together and in one very loud voice yelled, "Thank you astronomers!"

Wow! Thanks to everyone, volunteers and Hightower Trail 4th grade, it was a great night of sharing the sky!



The astronomers at their telescopes, awaiting darker skies and Hightower Trail 4th grade students and faculty.



Movie Clip Shows Whirlwinds Carrying Dust on Mars

NASA News Release - April 21, 2005

NASA's Mars Exploration Rover Spirit is taking movies of dust devils -- whirlwinds carrying dust -- scooting across a plain on Mars.

Clips consisting of a few frames of two different dust devils are available online at http://www.nasa.gov/vision/universe/solarsystem/mer_main.html and <http://marsrovers.jpl.nasa.gov>. These were taken on April 15 and April 18, and capture more movement as seen from the surface than any previous imaging of martian dust devils.

"This is the best look we've ever gotten of the wind effects on the martian surface as they are happening," said Dr. Mark Lemmon, a rover team member and atmospheric scientist at Texas A&M University, College Station.

Spirit, operated from NASA's Jet Propulsion Laboratory in Pasadena, Calif., has been using its navigation camera to routinely check for dust devils. It began seeing dust devils last month in individual frames from the camera. Lemmon said, "We're hoping to learn about how dust is kicked up into the atmosphere and how the wind is interacting with the surface. It's exciting that we now have a systematic way of capturing dust devils in movies rather than isolated still images."

Spirit and its twin, Opportunity, successfully completed three-month primary missions in April, 2004, and have been exploring at increasing distances from their landing sites since then.

JPL, a division of the California Institute of Technology in Pasadena, manages NASA's Mars Exploration Rover project for NASA's Science Mission Directorate, Washington.



GASP (Georgia Astronomy in State Parks) Events

The following GASP events have been scheduled for 2005 so far:

April 30th - Hard Labor Creek State Park.

September 3rd - FDR State Park.

October (Date TBA) - Florence Marina State Park

November 19th - Unicoi State Park.

For information about these events, contact Joanne Cirincione at Starrynights@AtlantaAstronomy.org.

The GASP volunteers, 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 at FDR State Park on Labor Day weekend 2004.



May Dark Sky Observing Session

by Daniel Herron

The next DSO will be Saturday May 7th at Woodruff Boy Scout Camp. This will be our last DSO at Woodruff until the fall. Come out and let's have good times!!

There will also be a sort of new member orientation around 6:00 or 7:00 PM during the DSO at Woodruff. This will be similar to the orientation at Villa Rica, but will show members how to open and close the Woodruff site. I will also make myself available to anyone would wants to come up and learn a new (or old) scope, learn to star hop, learn the sky, help anyone with any programs (observing 101, Messier, etc.), to answer any questions members may have, and just be there as a guide.

Remember this is a Dark Sky Session. **Dark Sky rules will still apply!**

Please see <http://www.atlantaastronomy.org/docs/membership/AAC%20Handbook%202004.pdf> page 8 for more information.

Editor's Note

Most of the images in the Focal Point are in color, but you won't see that if you are getting the mailed version. You can download the full color version from the AAC web site each month. By reviewing the Focal Point over the Internet instead of having it mailed, you can save the club about \$12 a year in printing and mailing costs. It may not sound like much, but the more people that use the Internet to receive the Focal Point, the more money the club can save. Just send an email to Kat Sarbell (FocalPoint@AtlantaAstronomy.Org) requesting that your name be removed from the Focal Point mailing list.

Directions to White Hall at Emory

Meeting Location Information:

Turn onto Dowman Drive from North Decatur Road at the five way intersection (across from Everybody's Pizza). White Hall is located on the right across from the new Science & Math building. Parking is available along Dowman Drive on both sides of the road. There is also a gated parking lot on the left behind the Admissions Building. After 6PM there is no fee to park there. For more detailed directions on how to get to Emory University, visit 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. Membership is open to all. Membership fees are **\$30** for a family or single person membership. College Students membership fee is **\$15**. These fees are for a one year membership.

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 **\$29** 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 is: Atlanta Astronomy Club, PMB 305, 3595 Canton Road A9, Marietta, Georgia 30066.

Atlanta Astronomy Club Hot Line: Timely information on the night sky and astronomy in the Atlanta area. Call **770-621-2661**.

Internet Home 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 Contacts

President: Chuck Painter 404-386-3899
president@atlantaastronomy.org

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Elliott Recording Secretary: Clevis Jones
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Elliott Coordinator: Alesia Rast Alesia_Rast@mail.dnr.state.ga.us

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Light Trespass: Marc Sandberg 404-531-4227
sandberg235@earthlink.net

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PSSG Chairman: Peter Macumber pmacumber@nightsky.org **Co-Chairman:** Joanne Cirincione starrynights@AtlantaAstronomy.org

Sidewalk Astronomy / Board: Mark Banks 404-257-2766
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Woodruff Observ. Coordinator: John Lentini 770-984-0175
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Webmaster Atlanta Astronomy: Peter Macumber 770-941-4640
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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>

Calendar by Tom Faber (All times EST/EDT unless noted)

- May 1st, Sunday: Moon Last Quarter.
May 2nd, Monday: Moon near Mars.
May 5th, Thursday: Eta Aquarid Meteor Shower.
May 7th, Saturday: CEC Meeting 5PM - See p. 2 for details. DSO at Woodruff BSC; see p.7 or contact Daniel Herron for details.
May 8th, Sunday: Moon New.
May 13th, Friday: Bradley Observatory Open House. 8PM, Agnes Scott College. "The Quest of a Supernova Hunter" Tim Puckett-Puckett Observatory. (Last Bradley Open House until Fall)
May 15th, Sunday: Conjunction Mars-Uranus.
May 16th, Monday: Moon First Quarter.
May 19th, Thursday: Moon near Jupiter.
May 20th, Friday: AAC Meeting. 8PM. White Hall at Emory University.
May 21st, Saturday: Sidewalk Astronomy with Girl Scouts at Camp Meriwether, Luthersville, GA - contact Michael Smith (smith_michael@bellsouth.net) for details.
May 23rd, Monday: Moon Full (Planting Moon or Milk Moon).
May 24th, Tuesday: Moon occults Antares.
May 30th, Monday: Moon Last Quarter.
May 31st, Tuesday: Moon near Mars.
June 3rd, Friday: Mercury Superior Conjunction.
June 4th, Saturday: CEC Meeting 5PM - See p. 2 for details. DSO at location TBA.
June 6th, Monday: Moon New.
June 12th, Sunday: Pluto at Opposition.
June 14th, Tuesday: Moon First Quarter. Earliest Sunrise (~6:25AM at Atlanta).
June 15th, Wednesday: Moon near Jupiter.

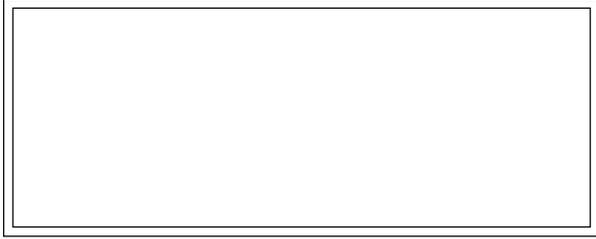
Atlanta Astronomy Club Listserve

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 Info

Please send articles, pictures, and drawings in electronic format on anything astronomy related to Kat Sarbell at focalpoint@atlantaastronomy.org. You can submit articles anytime up and including the deadline date. **The deadline for June is Thursday, May 26st at 4:00 PM ... Submissions will no longer be accepted after the deadline.**

FIRST CLASS



The Focal Point

Newsletter of The Atlanta Astronomy Club, Inc.

FROM:

Kat Sarbell

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Atlanta, GA 30309

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

Atlanta Astronomy Club

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Marietta, GA 30066