

The Focal Point

Vol. 36 No. 7*

The Atlanta Astronomy Club
Established 1947
March 2024

Editor: Tom Faber

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Charlie Elliott March Mtg and Potluck

Come for the food, stay for the stars!
Join us Saturday, March 9, 2024 at 4:30 p.m. at the Charlie Elliott Wildlife Center Campbell Aquatics Building for our next potluck dinner! If you’ve already been to any of our potlucks, you’re probably already looking forward to the good food and good company that these events have become known for. Potlucks are great when everyone chips in and ours are no different. In addition to all of the good things like banana pudding, barbecue, and mac & cheese, we need help with set-up and clean-up as well.



Please click on the following link to sign up for the potluck:

<http://bit.ly/CEpotluckRSVP>

Look Up!

Dennis Ruzeski will be on hand to give a detailed presentation on what you can expect to see in the night sky this and part of next month. Dennis is an accomplished photographer and astrophotographer and does a great job covering interesting events and sights in the night sky.

A few items to note:

Plan to treat this outing like you would a camping trip and be prepared. Dress appropriately for the weather and the environment, bring snacks and drinks if needed, and plan to take your trash with you.

There is a regularly serviced Porta-Potty on the field.

The main gate on Elliott Trail closes to new entry by vehicle at 7 p.m., but will automatically open for exiting traffic at all times. If you are not a member and plan to arrive after 7 p.m., please make arrangements with a club member for access at least a day in advance.

Please refrain from using white light on the field. Red headlamps are cheap

The March AAC Meeting

The next AAC meeting will be on Saturday March 23 at 7:30PM.

You asked for it! Saturday meetings!!

NEW LOCATION in Sandy Springs:

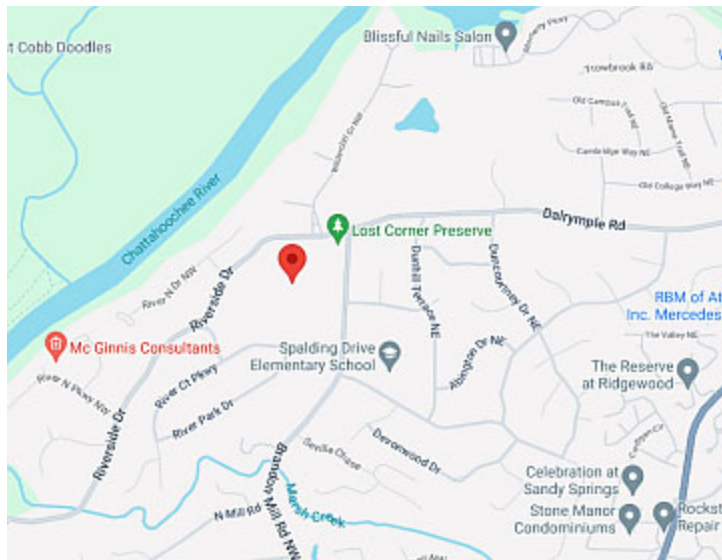
Lost Cottage at Lost Corner Preserve, 7300 Brandon Mill Road Northwest, Sandy Springs, GA 30328

<https://www.sandyspringsga.gov/places/lost-corner-preserve>

We have been working with Sandy Springs to have a regular meeting place. In trade for doing events with the city throughout the year, they will provide us a regular meeting place and schedule (we are working out the final details) but for now we will try this as a test of the new meeting place and time.

The topic for the talk is TBD at this time, but there may be a presentation about the upcoming solar eclipse..

After the talk we will handle club business, Q&A, and meet & greets. If you have any equipment questions or need help, bring your scopes and we will also try to help.



Credit: Google Maps

and easy to find at your favorite store. They’re even cheaper to make with a spare flashlight and red nail-polish on the lens.

For more information about Charlie Elliott Wildlife Center, please visit the Charlie Elliott website.

<https://georgiawildlife.com/charlie-elliott-wildlife-center>

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Observing on the Jon Wood Astronomy Field

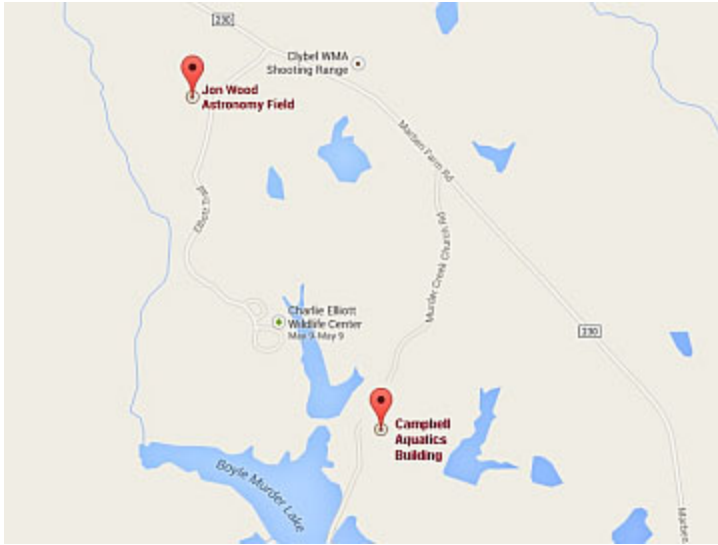
Please refrain from using white lights on the observing field to preserve night vision. Red lights are readily available at department and sporting goods stores in the Atlanta area. As stated above all are invited; however, to bring their own telescopes or binoculars or at least their interest in astronomy. For more information about Charlie Elliott Wildlife Center, visit: <https://georgiawildlife.com/charlie-elliott-wildlife-center>

Our Monthly Meetings and Public Observing Nights

Our monthly meetings and public observing nights are free and open to the public. Visit the “Our Calendar” tab at the top of the page for our 2024 meeting, observing, and outreach schedule. Start times vary through the year so please check back for details. View our Full Calendar of all meetings & outreach events here:

<http://ceastronomy.org/blog/outreach/charlie-elliott-astronomy-calendar>

It’s easy to become a member of Charlie Elliott Astronomy! Pay dues here: <http://atlantaastronomy.org/membership/>



Credit: Google Maps

AAC February Meeting Report

Photos by Tom Faber

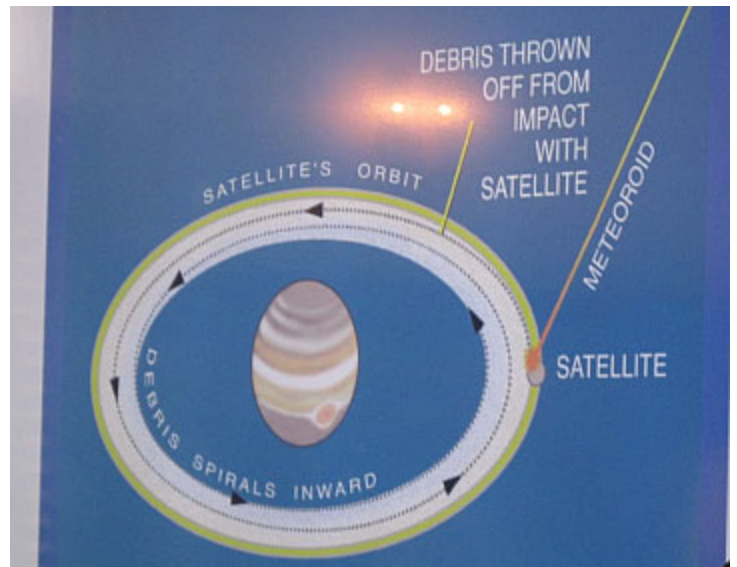
The Atlanta Astronomy Club’s February general meeting was held on Saturday, February 17, at a new location! Our meeting was held at the Lost Cottage at Lost Corner Preserve in Sandy Springs starting at 1:00PM. About 20 club members and guests were present. Club member Phil Danneman (top right) presented a very interesting talk entitled “Rings of Solar System Bodies”. Phil talked about the ring systems of Jupiter, Saturn, Uranus, Neptune, and rings around some minor bodies of the solar system.

After Phil’s talk AAC President David Lumpkin (next page) presented information about the club and upcoming events.

Join us at the Lost Cottage at 7:30PM on Saturday, March 23 for the next AAC General Meeting.



Rings Of Solar System Bodies



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Galaxy AM 1054-325 has been distorted into an S-shape from a normal pancake-like spiral shape by the gravitational pull of a neighboring galaxy, seen in this Hubble Space Telescope image. A consequence of this is that newborn clusters of stars form along a stretched-out tidal tail for thousands of light-years, resembling a string of pearls. They form when knots of gas gravitationally collapse to create about 1 million newborn stars per cluster. Credits: NASA, ESA, STScI, Jayanne English (University of Manitoba)

“String of Pearls” Star Clusters in Galaxy Collisions

NASA/STScI News Release - February 8, 2024

Summary

Long Trail of Clumpy Stars Follows Galaxy Interactions

When galaxies go bump in the night, they cook up new generations of stars that might otherwise have never been born. These close encounters between galaxies cause a gravitational tug-of-war, and gas and dust are drawn out into large streamers. The Hubble Space Telescope’s vision is so sharp that it can see clusters of newborn stars strung along these tidal tails. They form when knots of gas gravitationally collapse to create about 1 million newborn stars per cluster. These “string of pearls” features are probably more common in the early universe when galaxies collided more frequently.

Contrary to what you might think, galaxy collisions do not destroy stars. In fact, the rough-and-tumble dynamics trigger new generations of stars, and presumably accompanying planets.

Now NASA’s Hubble Space Telescope has homed in on 12 interacting galaxies that have long, tadpole-like tidal tails of gas, dust, and a plethora of stars. Hubble’s exquisite sharpness and sensitivity to ultraviolet light have uncovered 425 clusters of newborn stars along these tails, looking like strings of holiday lights. Each cluster contains as many as 1 million blue, newborn stars.

Clusters in tidal tails have been known about for decades. When galaxies interact, gravitational tidal forces pull out long streamers of gas and dust. Two popular examples are the Antennae and Mice galaxies with their long, narrow, finger-like projections.

A team of astronomers used a combination of new observations and archival data to get ages and masses of tidal tail star clusters. They found that these clusters are very young — only 10 million years old. And they seem to be forming at the same rate along tails stretching for thousands of light-years.

“It’s a surprise to see lots of the young objects in the tails. It tells us a lot about cluster formation efficiency,” said lead author Michael Rodruck of Randolph-Macon College in Ashland, Virginia. “With tidal tails, you will build up new generations of stars that otherwise might not have existed.”

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NGC 1977 Nebula in Orion by Eugene Rush

This image shows the Running Man Nebula which is a reflection nebula imbedded in the larger region of Sh-279 in the constellation Orion. The image was made using an 8 inch Ritchey-Chretien telescope with a ZWO ASI071MC pro camera. The image consists of six 180 minute subs and taken from Sharpsburg GA on January 29, 2024.

The tails look like they are taking a galaxy's spiral arm and stretching it out into space. The exterior part of the arm gets pulled like taffy from the gravitational tug-of-war between a pair of interacting galaxies.

Before the mergers, the galaxies were rich in dusty clouds of molecular hydrogen that simply may have remained inert. But the clouds got jostled and bumped into each other during the encounters. This compressed the hydrogen to the point where it precipitated a firestorm of star birth.

The fate of these strung-out star clusters is uncertain. They may stay gravitationally intact and evolve into globular star clusters — like those that orbit outside the plane of our Milky Way galaxy. Or they may disperse to form a halo of stars around their host galaxy, or get cast off to become wandering intergalactic stars.

This string-of-pearls star formation may have been more common in the early universe when galaxies collided with each other more frequently. These nearby galaxies observed by Hubble are a proxy for what happened long ago, and therefore are laboratories for looking into the distant past.

The Hubble Space Telescope is a project of international cooperation between NASA and ESA. NASA's Goddard Space Flight Center in Greenbelt, Maryland, manages the telescope. The Space Telescope Science Institute (STScI) in Baltimore, Maryland, conducts Hubble and Webb science operations. STScI is operated for NASA by the Association of Universities for Research in Astronomy, in Washington, D.C.

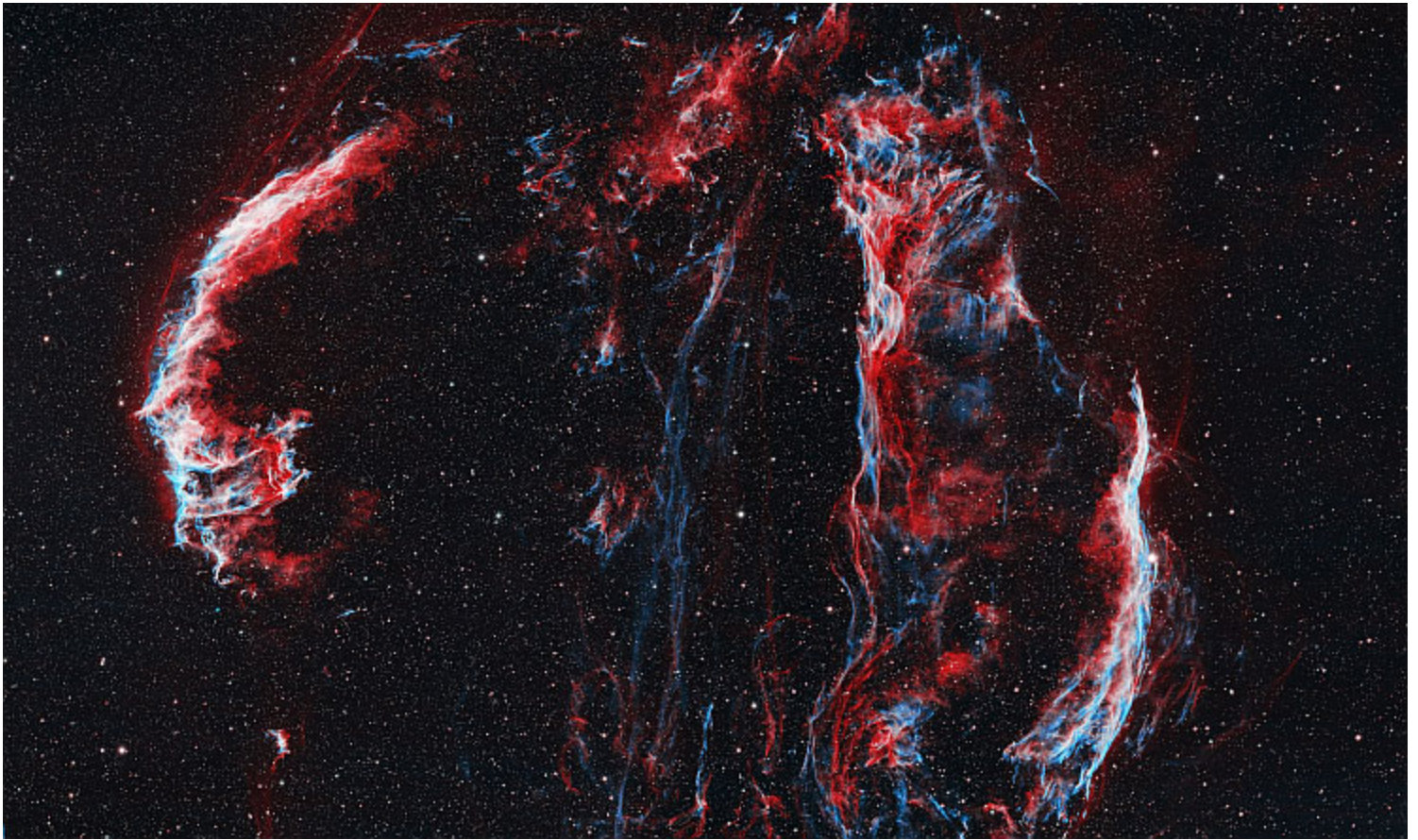


Galaxy Group M105, NGC3384, NGC3389 by Clay Turner

This image is a stack of 60 by 180 seconds. Telescope is a RASA 11 V1. Camera is a ZWO ASI 2400 MC Pro OSC. Mount is a Celestron CGX. Capture is with NINA and PhD Guiding. Processing is with PixInsight. For more information on these objects:

https://en.wikipedia.org/wiki/Messier_105

https://en.wikipedia.org/wiki/NGC_3384



The Cygnus Loop by Matt Aston

This picture was taken over the course of 4-5 nights, most of which were from my bortle 9 backyard in downtown Atlanta. The RGB Data was collected at Deerlick Astronomy Village during the Peach State Star Gaze this past October 2023 as well as at the observing field at Charlie Elliot. Most, if not all, of the Narrowband was done from my backyard in November. The scope is a Meade 6000 series 70mm Quad, Camera used was ZWO ASI2600MM cooled to -10°C . Chroma LRGBSHO filters were used with this monochrome camera. LRGB Exposure times were 120s subframes for a total integration of 5 hours. The narrowband exposures were 300s subframes. Total Hydrogen data: 18hours. Total Oxygen data: 7 hours. Image was stacked and Processed in Pixinsight.

The Cygnus Loop, a vast expanse of brightly colored Hydrogen and Oxygen gases, is a supernova remnant left behind by a massive stellar explosion almost 8,000 years ago. Located in the constellation of Cygnus the Swan, this object is 1500 light-years away from Earth and has a diameter of 120 light-years across!

For more information about the Cygnus Loop see:

https://en.wikipedia.org/wiki/Cygnus_Loop

2024 Zombie Party

Zombie Party 2024 (Observing Event)

Date: Thursday May 9 - Sunday May 12 (Come for 1 night or all 3 nights)

Time: Begins 4:00 PM Thursday - Ends Noon Sunday

Location: Deerlick Astronomy Village, Aaron Grier Rd SE, Crawfordville, GA 30631

A no frills, three night, mini star party. A nice introduction to star parties for beginners. Held At the Deer Lick Astronomy Village (DAV) near Crawfordville, GA, one of the darkest locations within a 2-hour drive from Atlanta (magnitude 6 - 6.5 skies).

A great time to do that Messier Marathon. Observe from dusk to dawn and you are officially a ZOMBIE!!!

DAV has plenty of camping, showers & flush toilets, electricity, Wi-Fi & a large picnic shelter.

Camping fee is \$10 a night.

You are responsible for practicing any state mandated COVID safety protocols (i.e. masks & social distancing) while on the field.

(Editor's note: This event is called a "Zombie Party" because of the appearance many of the attendees have after being up all night observing and/or imaging).

The **Atlanta Astronomy Club, Inc.**, one of the South's largest and oldest astronomical society, meets at **3:00 P.M.** on the 3rd Saturday of each month at the Fernbank Science Center in Decatur, or occasionally at other locations or times. 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 **\$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.



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 posted. 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/atlastro>.

AAC Officers and Contacts

President: David Lumpkin President@AtlantaAstronomy.org

Program Chair: Open 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: Lilli Lindbeck,

Secretary@AtlantaAstronomy.org

Board Chair: Sharon Carruthers Treasurer@AtlantaAstronomy.org

Board: Brigitte Fessele, bhfessele1@gmail.com

Board: Open

Board: Steve Phillips sandsphillips@att.net

ALCor: Ken Olson, keneolson@yahoo.com

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director@ceastronomy.org

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Elliott Recording Secretary: Daniel de la Reza
secretary@ceastronomy.org

Elliott Program Coordinator: Steve Siedentop
program@ceastronomy.org

Elliott Outreach Coordinator: Marie Lott
outreach@ceastronomy.org

Elliott Astrophotography Coordinator: Mike Mardis

Elliott Chapter AL Liaison: David Whalen

Elliott Facilities Coordinator: Matt Harvey
facilities@CEastronomy.org

Georgia Astronomy in State Parks: Sharon Carruthers
Treasurer@AtlantaAstronomy.org

PSSG Chairman: Peter Macumber pmacumber@nightsky.org

PSSG Co-Chair: Open

Sidewalk Astronomy: Open
sidewalkastronomy@AtlantaAstronomy.org

Light Tresspass: Ken Edwards, Contact info TBA

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

AAC Webmaster: Daniel Herron

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

AAC Events are listed in BOLD

- Mar 3rd, Sunday: Moon near Antares morning.
- Mar 4th, Monday: Moon Last Quarter.
- Mar 5th, Tuesday: Moon in middle of Sagittarius Teapot.
- Mar 9th, Saturday: **CE Chapter Meeting & Potluck, 4:30PM.**
- Mar 10th, Sunday: New Moon. Daylight Saving Time begins 2 AM.
- Mar 13th, Wednesday: Moon near Jupiter evening.
- Mar 14th, Thursday: Moon near Pleiades evening.
- Mar 16th, Saturday: Moon First Quarter. DAV Open House 5PM-11PM.
- Mar 24th, Sunday: Mercury greatest elongation evening.
- Mar 25th, Monday: Full Moon. Penumbral Eclipse Start: 12:53AM, Max 3:13AM, End: 5:32AM.
- Apr 1st, Monday: Moon Last Quarter.
- Apr 6th, Saturday: **CE Chapter Meeting, 6:00PM.** Moon near Mars & Saturn morning.
- Apr 8th, Monday: New Moon. Partial Solar Eclipse Start 1:45PM, Max 3:04PM, 4:20PM.
- Apr 9th, Tuesday: Moon near Jupiter evening.
- Apr 10th, Wednesday: Moon near Jupiter.
- Apr 15th, Monday: Moon First Quarter.
- Apr 23rd, Tuesday: Full Moon.
- May 1st, Wednesday: Moon Last Quarter.
- May 4th, Saturday: **CE Chapter Meeting , 6:30PM.**
- May 7th, Tuesday: New Moon.
- May 9th, Thursday: **AAC Zombie party at DAV begins - see p 6.**
- May 12th, Sunday: **AAC Zombie party at DAV ends.**
- May 15th, Wednesday: Moon First Quarter.

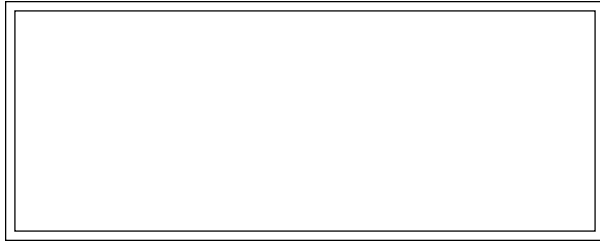
For more event listings and updates see the calendar at www.atlantaastronomy.org

Atlanta Astronomy Club Listserv

Because of the shutdown of Yahoo Groups, the Atlanta Astronomy Club Mailing List has been moved to IO Groups. You can visit the group, start reading messages and posting them here: <https://groups.io/g/AtlantaAstronomyClub>.

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 with images separate but Word documents or PDFs are okay. **The deadline for April is Saturday, 23 March. Submissions received after the deadline will go in the following issue.**



FIRST CLASS



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Atlanta Astronomy Club
P.O. Box 76155
Atlanta, GA 30358-1155
www.atlantaastronomy.org
On Twitter at <http://twitter.com/atlastro>

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

Newsletter of The Atlanta Astronomy Club, Inc.

The Focal Point

