

# The Focal Point

The Atlanta Astronomy Club  
Established 1947  
February 2024

Vol. 36 No. 6

Editor: Tom Faber

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## Charlie Elliott February Meeting and Observing

Join us at 4 p.m., Saturday, February 10, at the next gathering of the Charlie Elliott Astronomy Club at the Charlie Elliott Wildlife Center Campbell Aquatics Building as GSU grad student Zach Way presents “Learning About Low-Mass Stars with Very Large Surveys.”

The “meeting” starts at 4 p.m. with opening remarks followed by a short presentation on what’s up in the sky to observe the current month and into the next one. Our featured presentation will immediately follow. Afterwards, all are invited to our nearby observing site (also within the park) and of course weather-permitting.

Zach describes his upcoming presentation thusly: “Low-mass stars have traditionally been hard to observe because of their inherent dimness. However, as astronomical surveys broaden in scope and depth, a large amount of K and M dwarf data has been collected, yet our understanding of a low-mass star’s fundamental parameters (e.g., mass, effective temperature, metallicity) have remained relatively unconstrained.” Zach’s talk will cover some of the background of the study of low-mass stars, how astronomers have leveraged surveys like Gaia space observatory and the Sloan Digital Sky Survey to study large stellar populations (>1 million), and what low-mass stars can teach us about the history of our Milky Way.

Zach describes his foray into astronomy this way: “I’m actually a weird case in that I didn’t set out to be an astronomer when I began studying astrophysics at the University of Wisconsin-Madison in 2015. Instead, I was very passionate about pursuing physics and mathematics. I did some research with a few different physics professors, but I really enjoyed working on one-dimensional models of stars with the software MESA. I didn’t get into observational astronomy until after I left UW-Madison and



## The February AAC Meeting

The next AAC meeting will be on February 17 at 1:00-3:00 PM.

You asked for it! Saturday meetings!!

NEW LOCATION in Sandy Springs:

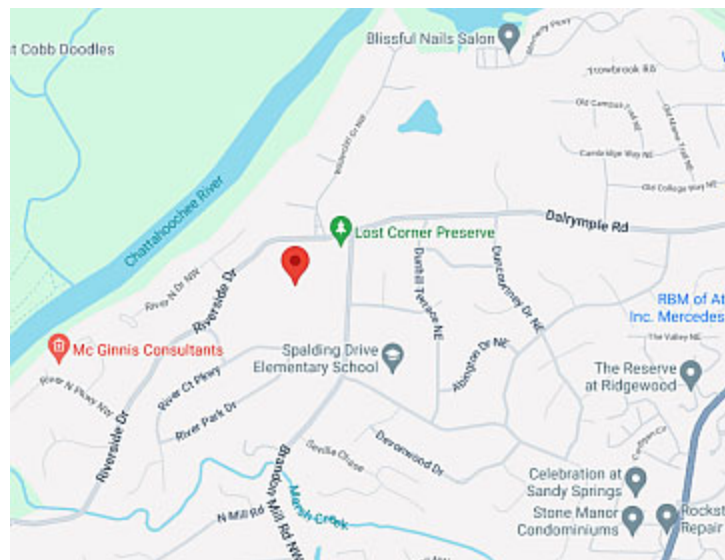
Lost Cottage at Lost Corner Preserve, 7300 Brandon Mill Road Northwest, Sandy Springs, GA 30328

<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 for February

AAC Observing Chair Daniel Herron will do a talk entitled “Where is Everyone” on the Fermi Paradox and possible solutions to this problem.

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

I then worked for the All-Sky Automated Survey for SuperNovae (ASAS-SN) for a few years before attending grad school at Georgia State University. Now, my primary research interest is in using large surveys with big datasets to infer the fundamental properties of low-mass stars and, to this end, have worked for the Sloan Digital Sky Survey for ~8 months. It would be especially cool to find a way to accurately predict the metallicities of

*Continued on next page*

M-dwarfs so that we can use them to learn about the history of the Galactic Halo.”

More details — including route instructions — at <http://ceastronomy.org/blog/home/>

### 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 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>

### Observing on the Jon Wood Astronomy Field

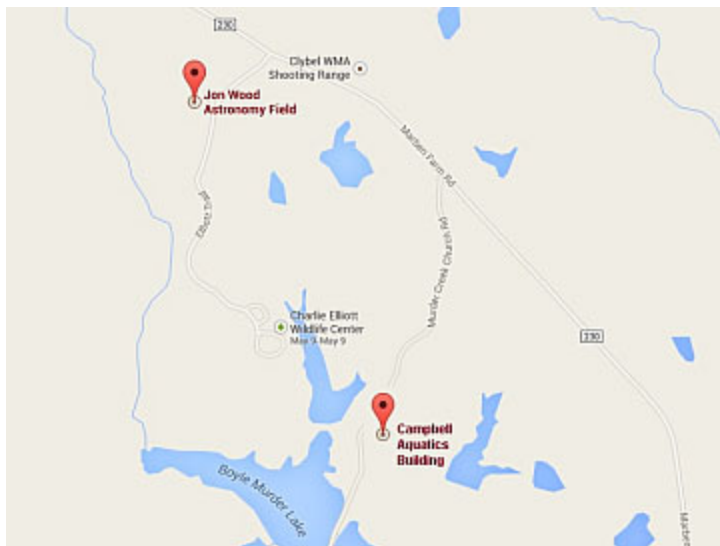
Please refrain from using white lights on the observing field to preserve night vision. Red lights are readily available at department and sporting goods stores in the Atlanta area. As stated above all are invited; however, to bring their own telescopes or binoculars or at least their interest in astronomy. 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 2023 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 with here: <http://atlantaastronomy.org/membership/>



Credit: Google Maps

## Remembering Jim Moore

The AAC was saddened to hear of the sudden passing of long time AAC member and past President (2003-2004) Jim Moore. Jim and his family were members of the AAC since the 1990's. In addition to astronomy Jim also had many other interests. He will be sorely missed. Here is Jim's obituary:

James Howard Moore, 70, passed away on January 17, 2024, in Doraville, GA.

James (Jim) Moore was born on September 15, 1953 in Miami, FL, to Latimer Eugene and Jean Moore.

Jim graduated from Miami Palmetto Senior High in 1971, and went on to earn a Bachelor of Fine Arts in Music from Florida International University in 1976. He spent 5 Years as a Georgia Peace Officer. He began his most recent career as a Pastor in 1997 and worked until the time of his passing.

He married Julia Baxley on May 13, 1977 in Miami Florida. The couple had 6 children: Marian, James Jr.(Jake), Daniel, Anna, David (Luke), and Sarah, and 11 grandchildren.

Jim was best known for his love of history, literature, and writing. He was a lifelong learner and loved sharing his knowledge. Jim also served in the Georgia State Defense Force from 1989 until the present. Jim is survived by his loving wife, Julie, his children, and grandchildren.

Funeral Services were held on Sunday, January 21st, 2024, at 3:00 PM at Gwinnett Baptist Tabernacle. Burial was at Honey Creek Woodlands, on Tuesday, January 23rd, 2024, at 1:00PM.

On-line condolences may be expressed at [www.crowellbrothers.com](http://www.crowellbrothers.com). Arrangements entrusted to Crowell Brothers Funeral Homes & Crematory, 5051 Peachtree Industrial Boulevard, Peachtree Corners, GA 30092.



Credit Julia Moore



## Comet and Galaxies by Dan Llewellyn

Pictured above are Comet 62P/Tsuchinshan with the Leo Triplet, galaxies NGC 3628 (“The Hamburger Galaxy”), M66, and M65. This was imaged three days past a full moon on December 29, 2023 at 6:07am EST. It was very challenging to process due to the moon’s brightness. It is composed of a stack of 30-8 second subs using my Esprit 150, Sony a7s, and Orion LPR.

For more information about these objects:

[https://en.wikipedia.org/wiki/NGC\\_3628](https://en.wikipedia.org/wiki/NGC_3628)

[https://en.wikipedia.org/wiki/Messier\\_65](https://en.wikipedia.org/wiki/Messier_65)

[https://en.wikipedia.org/wiki/Messier\\_66](https://en.wikipedia.org/wiki/Messier_66)

<https://en.wikipedia.org/wiki/62P/Tsuchinshan>





## The Draco Galaxy Group by Clay Turner

The Draco Group consists of (L2R) NGC 5985, NGC 5982, and NGC 5981. This was just eleven subs on a RCOS20 (20 inch Ritchey Chretien) at Hard Labor Creek Observatory. The scope has been replaced by a PlaneWave CDK700. Data taken on 7 April 2021.

For more information on these objects:

[https://en.wikipedia.org/wiki/NGC\\_5982](https://en.wikipedia.org/wiki/NGC_5982)

[https://en.wikipedia.org/wiki/NGC\\_5985](https://en.wikipedia.org/wiki/NGC_5985)



## Fireball near Orion by Ed Albin

There was a nice meteor over the Astronomy Village on Thursday evening, January 18 at 6:41 PM EST. The fireball was picked up in the southern sky through partly cloudy skies (DAV AllSky7 Meteor Camera / AMS129).

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## Enigmatic Flash of Energy Comes from Merging Galaxies

STScI News Release January 9, 2024

To the naked-eye, the sky looks deceptively quiet. But to radio astronomers there are powerful bursts of energy that pop off all over the sky like camera flashes at a stadium performance. The gusher of radiation released can briefly outshine an entire galaxy. The blasts come and go so fast, winking out in less than a couple seconds, they've earned the name fast radio bursts (FRBs). Though the triggering mechanism is unknown, it must involve extreme physics, perhaps the collision of black holes or neutron stars. They are hard to pin down. Astronomers using Hubble had to peer halfway back to the big bang to find the location of the farthest and brightest FRB to date. It exploded amongst a compact group of several early galaxies that may be in the process of merging. Coincidence or clue? Finding an FRB in a weird place may help astronomers unravel their mystery. Full article: <https://hubblesite.org/contents/news-releases/2024/news-2024-001>

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## Bright Lunar Halo by Tom Faber

This very bright lunar halo was imaged by Tom Faber just past midnight on January 26. The moon was less than a day past full at this time. In the lower left is the head of Leo and in the upper right are Castor and Pollux in Gemini. This type of halo is called a 22-degree halo because the radius of the halo (the angular distance between the moon and the halo) is 22 degrees. They are more commonly seen around the sun. Solar or lunar 22-degree halos are caused by the refraction of sunlight or moonlight in the tiny ice crystals that make up cirrus clouds.

For more information: [https://en.wikipedia.org/wiki/22%C2%B0\\_halo](https://en.wikipedia.org/wiki/22%C2%B0_halo)



## 2024 Zombie Party

Zombie Party 2024 (Observing Event)

Date: Thursday May 9 - Sunday May 11 (Come for 1 night or all 3)

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](mailto: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/atlaastro>.

### AAC Officers and Contacts

**President:** David Lumpkin [President@AtlantaAstronomy.org](mailto:President@AtlantaAstronomy.org)

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**Corresponding Secretary:** Tom Faber

[Focalpoint@AtlantaAstronomy.org](mailto:Focalpoint@AtlantaAstronomy.org)

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**Recording Secretary:** Lilli Lindbeck,

[Secretary@AtlantaAstronomy.org](mailto:Secretary@AtlantaAstronomy.org)

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

**Board:** Brigitte Fessele, [bhfessele1@gmail.com](mailto:bhfessele1@gmail.com)

**Board:** Open

**Board:** Steve Phillips [sandsphillips@att.net](mailto:sandsphillips@att.net)

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**Elliott Astrophotography Coordinator:** Mike Mardis

**Elliott Chapter AL Liaison:** David Whalen

**Elliott Facilities Coordinator:** Matt Harvey

[facilities@CEastronomy.org](mailto:facilities@CEastronomy.org)

**Georgia Astronomy in State Parks:** Sharon Carruthers

[Treasurer@AtlantaAstronomy.org](mailto:Treasurer@AtlantaAstronomy.org)

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

**PSSG Co-Chair:** Open

**Sidewalk Astronomy:** Open

[sidewalkastronomy@AtlantaAstronomy.org](mailto:sidewalkastronomy@AtlantaAstronomy.org)

**Light Tresspass:** Ken Edwards, Contact info TBA

**Woodruff Observ. Coordinator:** Sharon Carruthers

[Treasurer@AtlantaAstronomy.org](mailto:Treasurer@AtlantaAstronomy.org)

**AAC Webmaster:** Daniel Herron

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

### AAC Events are listed in BOLD

- Feb 2nd, Friday: Moon Last Quarter.
- Feb 9th, Friday: New Moon.
- Feb 10th, Saturday: **CE Chapter Meeting, 4 PM.**
- Feb 14th, Wednesday: Moon near Jupiter.
- Feb 16th, Friday: Moon First Quarter.
- Feb 17th, Saturday: **AAC Meeting at 1 PM.**
- Feb 23rd, Friday: Venus conjunction with Mars morning.
- Feb 24th, Saturday: Full Moon.
- Feb 28th, Wednesday: Mercury at Superior Conjunction. Saturn Conjunction with Sun.
- Feb 29th, Thursday: Leap Year Day.
- 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.
- 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 8th, Monday: New Moon.

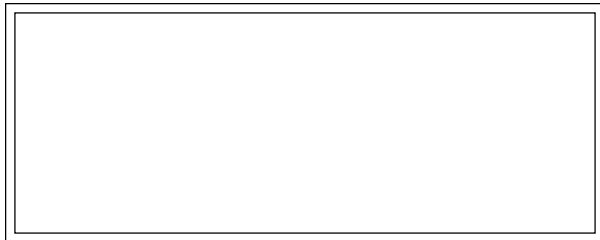
For more event listings and updates see the calendar at [www.atlantaastronomy.org](http://www.atlantaastronomy.org)

### 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](mailto: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 March is Sunday, February 25. Submissions received after the deadline will go in the following issue.**



FIRST CLASS



[www.betagg.com](http://www.betagg.com)



Newsletter of The Atlanta Astronomy Club, Inc.

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](http://www.atlantaastronomy.org)

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



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