

July 2024

Meetings at Highland Road Park Observatory and online through YouTube and Jitsi

<https://meet.jit.si/brasmeet>

Calendar:

- **30 June, 2PM: Outreach Training Session**
- **8 July:**
 - **6PM: Light Pollution Committee**
 - **7PM: General Meeting**
- **15 July, 9:30AM: Little Lambs Outreach**
- **4 August 5PM: General Meeting at LASM**

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Vice President's Word

Hi Everyone,

The heat and long days are definitely upon us. Regardless, I hope you find the ambition and time to get out to do some observing. The Summer sky has some real show pieces!

Since Don is still on his Summer hiatus, this message will be two-fold. I'll talk about our upcoming monthly meeting plans AND talk about what the club is doing. First, the programs.

As far as upcoming programs for our meetings, we've got some great guests and even a visit to the Planetarium at the Louisiana Art and Science Museum. (More on that in a second.)

For our **July 8th** meeting, we'll have a light-hearted presentation from our own Merrill Hess on the Good and the Bad regarding Hollywood and Space Exploration/Astronomy. We'll make it more festive with some pizzas and snacks, too. (We're 6 months away from our December pot-luck so I suppose it's a good time for some food. Picnics and crawfish boils have been proposed in the past, but I think everyone will be happy to keep this inside with some air conditioning this Summer!) We'll be sure to have a variety of veggie and meat pizzas to try to suit people's tastes. This kind of presentation is always good for a laugh and maybe you'll learn of a show/movie you'd actually like to see!

Always the optimist, the plan will also include a group observing session when it gets dark enough at the end of the meeting. We will pick a few constellations and we can go out to identify them in the sky and record our observations. This can be a jump start to completing the Constellation Hunter observing club for the Astronomical League. We'll try to do a few or more each month and you'll have your certificate and pin in no time!

Regarding our August meeting...

ATTENTION!! Our August meeting day/time/location will be changed. We will meet on **Sunday, August 4th at the Louisiana Art and Science Museum at 5pm in the Planetarium**. We'll have a brief meeting and then we'll have a presentation from Jay Lamm, the Planetarium Director. The presentation will include a sky tour via the dome and one of the programs being shown in the Planetarium. Afterwards, we'll get a quick behind-the-scenes tour of the Planetarium and its projection booth.

We will also be doing an outreach at the LASM earlier in the day (See Outreach Notes) so this would be a great time to dip your toes into the volunteer pool. Our outreach will only be for a couple of hours so volunteering will also get you a FREE visit to the rest of the Museum that day.

Parking will be on your own, but all street parking is **FREE** on Sundays so hopefully you won't have any issues. As I get more information, I'll let y'all know!

I'm really looking forward to both our meeting on July 8th and this special outing to the LASM. The last time we visited there for a club outing was 2011 so we're long overdue. I hope you'll plan to be there for it!

Now for other club stuff:

There's not a whole lot going on at the moment other than our continuing efforts to make space in the BRAS closet and get updates to our streaming system at the HRPO and to our web presence.

For the closet, we are making lots of progress in large part to the efforts of Joel Tews who has made several trips to the HRPO and organized the shelves and boxes. Now we know **WHAT** is in there, we just need to decide what to **DO** with it all!

I have been working at home with our new webcams and microphones figuring out how to integrate them with an open source streaming platform to make our streamed meetings more watchable for those unable to join us in person. These upgrades should also make it much more easy and enjoyable to have special guest presenters via the web. It's a learning process, but it should pay off soon.

Now I'd like to take a moment to say thank you to Michele Fry for her service the past year or more as our interim webmaster. It's just another of those thankless jobs that needs to be done and we are grateful that she took up the reins for a while. Our new webmaster is Yours Truly! I had a very little bit of experience with HTML coding back in college and have dusted it off. I met with our website host, Mike, the other day and have already started making some updates to the website. More to come!!

Phew! I know that seemed like a looooong message, but remember...I'm speaking for two! Again, we have some great things coming up and we'd love to see you there so mark up your calendars. In the meantime, keep looking up!

Clear Skies,
Ben Toman

Outreach Report

Hi Everyone,

This is a short one this month. Not a whole lot going on and not a whole lot coming up. It's Summer!

We did have a great time at the Louisiana Art and Science Museum helping out with Dino Days. They had over 600 visitors and based on the amount of stickers we gave out, we personally interacted with about 475 of them. We had some pictures in The Advocate from the event, too! It's been a lot of fun building a good relationship with the LASM and we're looking forward to plenty more Outreach opportunities there. Thanks to Scott and Roz for joining me and volunteering at the event. (Scott gets special mention as he was outside almost the entire time providing solar observing!)

Now, onto the upcoming events. Of course, by the time you get this newsletter it should be close to the time we will have our Outreach Training Session. (For lack of a better title.) We'll be at the Highland Road Park Observatory on Sunday, June 30th at 2pm. We'll do a whole reboot of this experience that we had just started when the pandemic took over. It'll be a great primer for anyone that has never done any outreach with us but has an interest in learning what we do.

We'll also have a little trip to Lafayette to do an outreach event in July and then another outreach at the LASM in early August. (Details below.) I hope to see you at some of these events either as a volunteer or just stopping by to say Hi. If you are at all interested in helping out, just let me know so I can get you on the schedule!

Clear Skies,

Ben Toman

Upcoming Events

Sunday, June 30th

2pm. No longer than 2 hours.

HRPO

Outreach Training Session

Monday, July 15th

Little Lambs Mother's Day Out

St. Barnabas Episcopal in Lafayette

9:30am-11:00am

Demos and possible solar observing

Sunday, August 4th

Louisiana Art and Science Museum

Time: 5PM

See the Vice-President Message for more details



Ben shows off how the Age of Dinosaurs came to an end at LASM's Dino Days. (Image from LASM)



Here's a look at our setup for Dino Days while Roz shows off her ballroom dancing moves.

Secretary's Summary

General Meeting, 10 June:

call to order, 24 in attendance, 1 online.

Ben spoke about upcoming outreaches and events and about what the club had been up to during the past month.

Scott gave a presentation to the club about Electronic Assisted Astronomy and how it can improve outreach and engagement.

A Raffle was had.

The great drawing of the Celestron 8" scope was had: Chester P. won the big prize attendance to bring it home (we apologize for not getting a picture of him with his booty). The next big raffle will be announced later this summer, so stay tuned.

Quarterly Planning Meeting, 26 June:

We considered the advantages of the club picking up an EA scope. This seems like a good idea, but we'll need to decide the kind: we might want something with a built-in faux eyepiece.

AL elections were discussed.

We want a Star Party at HRPO sometime in September, dates pending.

We are contacting Port Hudson about having a club star party at Port Hudson.

We decided we're going to try to start introducing AL programs into our club star parties, starting with the Constellations.

Discussions were had on revamping our social media presence.

We did some organization of the closet. Raffle prizes were set up.

Observatory Notes

SOLAR VIEWING SPECIAL SESSION

Wednesday 3 July from 11:45am to 2:45pm

for ages six and older / no admission fee

Weather permitting, viewing of the Sun's image in three different manners—transferred onto a white surface, directly with safely-filtered optical light, and directly in safely-filtered hydrogen-alpha wavelength—will take place for three hours. Protective clothing and sunscreen are recommended.

THE EDGE OF NIGHT (Summer)

Friday 5 July from 8pm to 10pm

for ages six and older / no admission fee / binocular strongly recommended

It's not light, it's not dark. It's that special time called twilight, and HRPO wants to introduce you to it! Are all sections of the sky the same shade of blue? Which stars are seen first? Are Mercury and Venus or the Moon out? Is that moving object a plane, a satellite or space debris? How much actual darkness should I expect in a light-polluted city when twilight has passed? There is no other time like twilight. Bring it into your life!

SCIENCE ACADEMY

Saturdays from 10am to 12pm.

for Cadets aged eight to twelve / \$5 per Cadet per week (\$6 if out-of-parish)

advanced registration via [WebTrac](#) strongly recommended

[activity #531990] / parents may stay with or leave Cadet

Four Cadet minimum and sixteen Cadets maximum per session.

6 July = "Historic Experiments II" 13 July = "Mercury"

20 July = "A Natural Satellite to Visit"

EVENING SKY VIEWING

for ages six and older / no admission fee

Saturdays (6, 13 and 27 July) from 7:30pm to 10pm

Fridays (12, 19 and 26 July) from 8:30pm to 10pm

NIGHT VISIONS

HRPO houses a 50-cm reflector, a 40-cm reflector and several smaller telescopes to bring the majesty of the night sky to the public. Trained operators, sharing duties via a rotating roster, work throughout the year in shifts. Each operator has a pre-planned list of objects to highlight. However, requests will be taken if there is time and if all present have viewed the previous target.

LIGHT POLLUTION COMMITTEE

Monday 8 July from 6pm to 7pm

for ages fourteen and older / no admission fee

BATON ROUGE ASTRONOMICAL SOCIETY MEETING

Monday 8 July from 7pm to 9pm

for ages fourteen and older / no admission fee

FRIDAY NIGHT LECTURE SERIES

7:30pm / for ages fourteen and older / no admission fee

12 July = “Waiting for a Nova” What violent process can cause a star to temporarily outshine its surroundings by factors of up to hundreds of thousands—if not millions—and survive, only to do it all over again another day? This rare and astonishing event may be occurring very soon. Where will it happen? What will it look like from Earth?

19 July = “Apollo 11 Fifty-Fifth Anniversary” Tom Northrop (former BREC Center Supervisor) will present an extended highlighting of the trip that three men took—as the rest of the human species watched, waited, hoped and cheered. Assisted by the scientists and engineers and politicians and other supporters (and preceded by other brave astronauts who paved the way), Neil Armstrong, Edwin “Buzz” Aldrin and Michael Collins committed themselves to a goal that accelerated technological progress and elevated the human spirit.

26 July = “Our Birth Stars” A person’s birth star is a star whose light took as long to reach Earth as he’s been alive. Of course, birth stars change over the course of a human lifetime and are as varied as human beings themselves! How can you see yours?

LUNAR EXPLORERS CAMP

15 July to 19 July / 8am to 5pm daily. For ages eleven to thirteen.

\$125 per EBR-parish camper / \$150 per other-parish camper

[Cost covers entire session; limit thirty per session.]

This one-week-only session focuses on past accomplishments and future goals related to our sole natural satellite! There will be simulated moondust, overviews of transcripts and audio from actual Moon landings, and previews of actual human beings headed back to the Moon, then on the Mars. Parents may register in person at HRPO or online at Webtrac. The activity number is 231180.

APOLLO 11 FULL MOON PARTY

Saturday 20 July from 7pm to 11pm.

for ages six and older / no admission fee

Join us for our biggest event of the year! Food, physical science demonstrations, hands-on activities, games (with chances to earn prizes), a sky tour and the possibility to view no fewer than *seven* satellites and rocket bodies crossing the night sky. No admission fee; for all ages.

MERCURIAN ELONGATION

Sunday 21 July from 7:45pm to 9:15pm

for ages six and older / no admission fee

Periodically Mercury reaches its greatest angular separation in the sky (elongation) from the Sun. This is the safest way to view Mercury by amateurs. Come join us at the Burbank Soccer Complex! The planet will appear as a “half-Mercury”. The waning gibbous Moon will also be seen.

SOLAR VIEWING

Saturday 27 July from 12pm to 2pm

for ages six and older / no admission fee

Weather permitting, viewing of the Sun’s image in three different manners—transferred onto a white surface, directly with safely-filtered optical light, and directly in safely-filtered hydrogen-alpha wavelength—will take place for two hours. Protective clothing and sunscreen are recommended.

STEM EXPANSION: “History of Electronics”

Saturday 27 July from 3:30pm to 7:30pm

for ages twelve to sixteen. / \$15 each per in-parish registrant; \$18 each per out-of-parish registrant. Advanced registration via [WebTrac](#) required [activity #531993]. Registrant is Part I is not a prerequisite.

This program offers advanced topics, topic extensions and all-new games and activities to an older crowd. Certificates will be earned, and a section of archived experiments, some not seen in over fifteen years (and some *never* performed on site) take place. There are also giveaways and door prizes.

Sky Map



<https://in-the-sky.org>

SkyMap centered on July 15 at 10PM

For an interactive sky map, go to <https://in-the-sky.org>

Quick Picks—Events for July 2024

- Mon 1 [Mars](#) 4.1°S of [Moon](#)
- Tue 2 Pleiades 0.3°N of [Moon](#)
- Wed 3 [Jupiter](#) 5.0°S of [Moon](#)
- Fri 5 Earth at Aphelion - Dist: 1.0167 AU
- Fri 5 [New Moon](#)
- Sat 6 [Mercury](#) 0.1°S of Beehive
- Sun 7 Beehive 3.0°S of [Moon](#)
- Sun 7 [Mercury](#) 3.2°S of [Moon](#)
- Mon 8 [Jupiter](#) 4.7°N of Aldebaran
- Tue 9 Regulus 3.1°S of [Moon](#)
- Tue 9 [Venus](#) at Perihelion
- Fri 12 [Moon](#) Apogee at 404,363 km.
- Sat 13 [First Quarter Moon](#)
- Sat 13 Spica 0.9°S of [Moon](#)
- Wed 17 Antares 0.2°S of [Moon](#)
- Sat 20 [Mars](#) 4.7°S of Pleiades
- Sun 21 [Full Moon](#)
- Mon 22 [Mercury](#) at Greatest Eastern Elongation - 26.90°
- Wed 24 [Moon](#) Perigee at 364,914 km.
- Wed 24 Occultation of [Saturn](#) by the Moon
- Wed 24 [Mercury](#) 1.7°S of Regulus
- Sat 27 [Mercury](#) at Aphelion
- Sat 27 Delta-Aquarid Meteor Shower
- Sat 27 [Last Quarter Moon](#)
- Mon 29 Pleiades 0.1°N of [Moon](#)
- Tue 30 [Mars](#) 5.0°S of [Moon](#)
- Tue 30 [Jupiter](#) 5.4°S of [Moon](#)

Events courtesy of Telescopius.com

Looking up

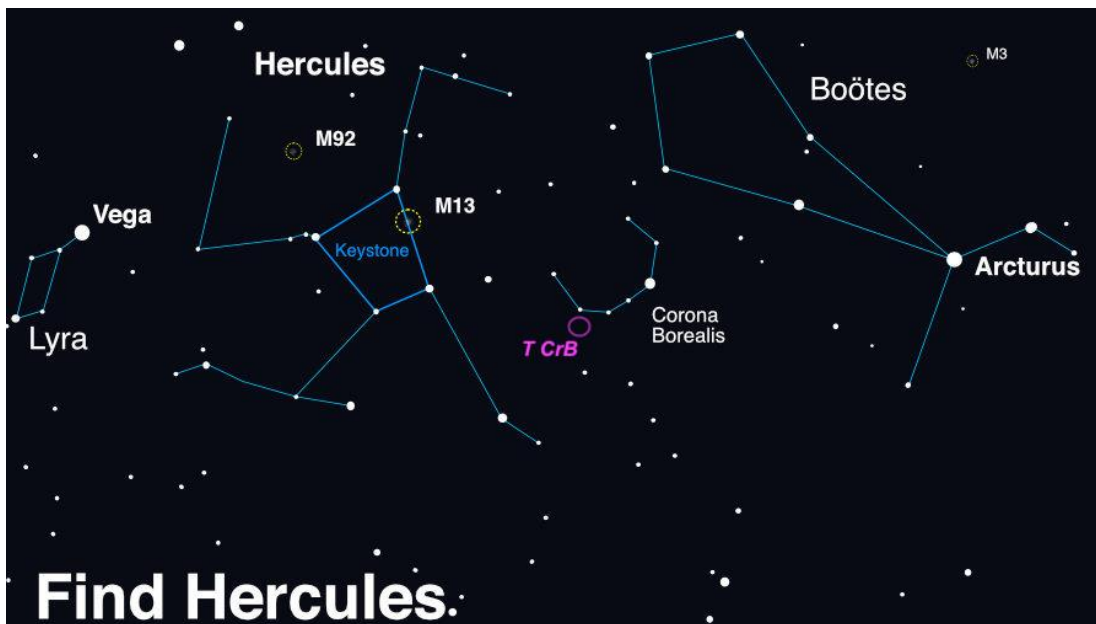
July's Night Sky Notes:

A Hero, a Crown, and Possibly a Nova!



By Vivian White

High in the summer sky, the constellation Hercules acts as a centerpiece for late-night stargazers. At the center of Hercules is the “Keystone,” a near-perfect square shape between the bright stars Vega and Arcturus that is easy to recognize and can serve as a guidepost for some amazing sights. While not the brightest stars, the shape of the hero’s torso, like a smaller Orion, is nearly directly overhead after sunset. Along the edge of this square, you can find a most magnificent jewel - the Great Globular Cluster of Hercules, also known as [Messier 13](#).



Look up after sunset during summer months to find Hercules! Scan between Vega and Arcturus, near the distinct pattern of Corona Borealis. Once you find its stars, use binoculars or a telescope to hunt down the globular clusters M13 (and a smaller globular cluster M92). If you enjoy your views of these globular clusters, you’re in luck - look for another great globular, M3, in the nearby constellation of Boötes. Image created with assistance from Stellarium: [stellarium.org](#)

Globular clusters are a tight ball of very old stars, closer together than stars near us. These clusters orbit the center of our Milky Way like tight swarms of bees. One of the most famous short stories, [Nightfall](#) by Isaac Asimov, imagines a civilization living on a planet within one of these star clusters. They are surrounded by so many stars so near that it is always daytime except for once every

millennium, when a special alignment (including a solar eclipse) occurs, plunging their planet into darkness momentarily. The sudden night reveals so many stars that it drives the inhabitants mad.

Back here on our home planet Earth, we are lucky enough to experience [skies full of stars](#), a beautiful [Moon](#), and regular [eclipses](#). On a clear night this summer, take time to look up into the Keystone of Hercules and follow this sky chart to the Great Globular Cluster of Hercules. A pair of binoculars will show a faint, fuzzy patch, while a small telescope will resolve some of the stars in this globular cluster.



A red giant star and white dwarf orbit each other in this animation of a nova similar to T Coronae Borealis. The red giant is a large sphere in shades of red, orange, and white, with the side facing the white dwarf the lightest shades. The white dwarf is hidden in a bright glow of white and yellows, which represent an accretion disk around the star. A stream of material, shown as a diffuse cloud of red, flows from the red giant to the white dwarf. When the red giant moves behind the white dwarf, a nova explosion on the white dwarf ignites, creating a ball of ejected nova material shown in pale orange. After the fog of material clears, a small white spot remains, indicating that the white dwarf has survived the explosion.

NASA/Goddard Space Flight Center

Bonus! Between Hercules and the ice-cream-cone-shaped Boötes constellation, you'll find the small constellation Corona Borealis, shaped like the letter "C." Astronomers around the world are watching T Coronae Borealis, also known as the "Blaze Star" in this constellation closely because it is [predicted to go nova sometime this summer](#). There are only 5 known nova stars in the whole galaxy. It is a rare observable event and you can take part in the fun! The Astronomical League has issued a [Special Observing Challenge](#) that anyone can participate in. Just make a sketch of the constellation now (you won't be able to see the nova) and then make another sketch once it goes nova.

Tune into our mid-month article on the [Night Sky Network](#) page, as we prepare for the Perseids! Keep looking up!

Posted:

- BRAS is looking to increase the ranks of its outreach army: contact Ben to find out how you can help.

Contact Information

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Reddit: <https://www.reddit.com/r/BRAstro/>

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