

April 2024

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

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

Calendar:

- **8 April: Total Eclipse of the Sun**
- **12 April: STEM day at Port Hudson**
- **15 April: Monthly Meeting**
 - **6PM Light Pollution Committee**
 - **7PM General Meeting**
- **16 April: Sidewalk Astronomies**
 - **7PM Perkins Rowe**
 - **8PM Gonzales Library**

- **14 May: Sidewalk Astronomy at Perkins Rowe**

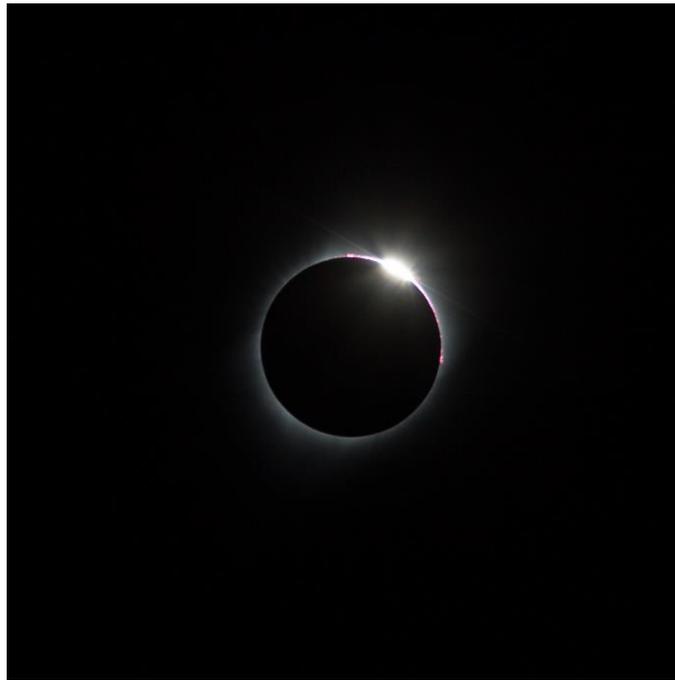
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President's Message

Well boys and girls, it's almost showtime! As I write this month's message, it's two weeks until the great Total Solar Eclipse of April 8th. Many of you, no doubt, traveled to see the last one in August, 2017, and many of you also went to see the annular eclipse last October. Those were child's play compared to the one we're about to experience. If you hang around Baton Rouge, shame on you. Baton Rouge will only see about 95% coverage. As I said at the last meeting, there is little difference between 90% coverage and 99% coverage. But there is an order of magnitude difference between 99% and 100%. For an eclipse like this one, it's "all or nothing"! If we're lucky enough to have clear skies, totality will last around four minutes depending on your location. That's twice as long as the 2017 eclipse. It will be at least twenty years before we get to see another one like this in North America.

During the 2017 total eclipse and the 2023 annular eclipse, I spent a good bit of time trying to photograph the events. I was pretty successful, but this time I'm purposely leaving my camera at home (or at least in the car). Eclipses are not just to be seen, but also experienced. Some of that experience is lost while fiddling with a camera. My advice is to sit back, enjoy the view, and observe the sights and sounds of the people and nature around you. Take it all in. That being said, here are a few shots I took of the 2017 eclipse. If you can't fight the temptation to snap some pics, I shot these at ISO 200, f/8, and exposures ranging from 0.4" to 1/800" depending on the brightness at the time. Naturally, the brightness changes as more or less of the Sun is visible.





Lastly, I wanted to recommend a new book I'm currently reading. It's titled "When the Heavens Went on Sale" by Ashlee Vance. I'm only about a third of the way through it so far, but it's thoroughly enjoyable. It discusses the path that private enterprises took, and continue to follow, in wresting Space from the grip of bureaucratic governments. It traces the origins of some lesser-known visionaries at NASA's Ames Research Center through the founding of companies such as Planet Labs in the US and Rocket Lab in New Zealand. Although often feared or criticized by us astronomy enthusiasts, the work that these new companies are doing is phenomenal. The book is well worth the read.

Vice President's Word

Hi Everyone,

It seems immodest to thank last month's speaker since it was me, but I think it was a fun meeting and we should all be well prepared for this upcoming eclipse, however we plan to view it. We had a few people stay after the meeting to do some observing, too. It's a great time to dust off some of those lesser used scopes in our closet.

As mentioned before and elsewhere, our April meeting will be postponed ONE WEEK to Monday, April 15th due to the solar eclipse. Our meeting will be a show and tell about our experiences with the eclipse. With so many of us travelling to get to the path of totality, I'm guessing SOMEONE (hopefully a LOT of someones) will have been lucky enough to see it and we want to hear about it! Bring your pictures and stories!!

Also at the meeting, we will continue to sell raffle tickets for the Celestron SCT in the carrying case. Tickets are \$5 each and you won't need to be present to win when the drawing is held at our June meeting. Help us raise a little money and empty out the closet of unused scopes by buying a ticket!

Finally, I forgot to mention at the last meeting that we had been contacted by BRCC regarding a telescope they have in their science department. They wanted to be able to use it to watch the upcoming partial eclipse here in Baton Rouge on the 6th, but no one there knew if the scope was still in working order.

Scott and I drove over and assessed the scope. It is a fine piece of equipment, but needed a few things. We purchased new attachment knobs, a solar filter and power supply to donate on behalf of the club, but they took up a collection among the teachers and gave us a check to cover the amount. (It was only \$140.) They have been extremely gracious and we'll be heading over there soon to teach them how to get it set up and running so they'll be ready for eclipse day. Just one more way we are making our club known and making an impact in the community!

Clear Skies,
Ben Toman
Vice-President

Outreach Report

Hi Everyone,

Since the last newsletter we have participated in 7 outreach events. (I told you we had a busy month coming!) Each of the events we did were repeat customers, too. I'm happy to say that all the events were successful outings and we had a great time helping out.

All told, we were at Westdale Heights Academic Magnet, Oak Grove Primary, Ascension Parish Library, Rockin' At The Swamp, Glasgow Middle School, Perkins Rowe and the Louisiana Art and Science Museum. A huge thank you to our volunteers that helped out throughout the month: Scott C., Roz R., Chris and Annette R., Chris K., Troy B., Coy W., John N., Trey A., Don W., Hayley F. and Ashley and Ben T. (Yes, even my wife came out to help out at an event!)

We still have an outreach to go this month (March, as I'm writing this) and it's been tough getting volunteers for it. It's a combination of just being stretched too thin and also being down a few hands. We'll get the job done thanks to Scott and Roz!

As I mentioned, we are down a few hands in our normal volunteer ranks. I'd like to encourage any and all of our members, whether you've been in the club for years or have only recently joined, to consider helping out with an outreach event sometime. You don't need any prior experience and someone will be there to show you the ropes. As I've mentioned many times before, it's mainly by doing these outreach events that I've learned a lot of what I know about astronomy. One bit of information learned at a time, but it's grown over the many years I've been active. You'll be providing a wonderful community service along the way and it's just a fun time!

I hope to see some more members step up to bolster our volunteer ranks. We've got a solid group of people helping out right now, but when we get months like this past one, the holes in our armor are exposed. I'm looking forward to some new members helping to patch those up!

As always, have a look at the upcoming events below (a much more manageable list) and let me know if you'd like to help us out.

Clear Skies,
Ben Toman
Outreach Chairperson

Upcoming Outreach Events

Friday, April 12th

9:30am-11:30am

STEM day at Port Hudson

Tuesday, April 16th (the night after our monthly meeting)

7pm-9pm

Sidewalk Astronomy at Perkins Rowe

Tuesday, April 16th (Yup, the same night!)

8pm-9:30pm

Sidewalk Astronomy at the Library in Gonzales

Tuesday, May 14th

7pm-9pm

Sidewalk Astronomy at Perkins Rowe

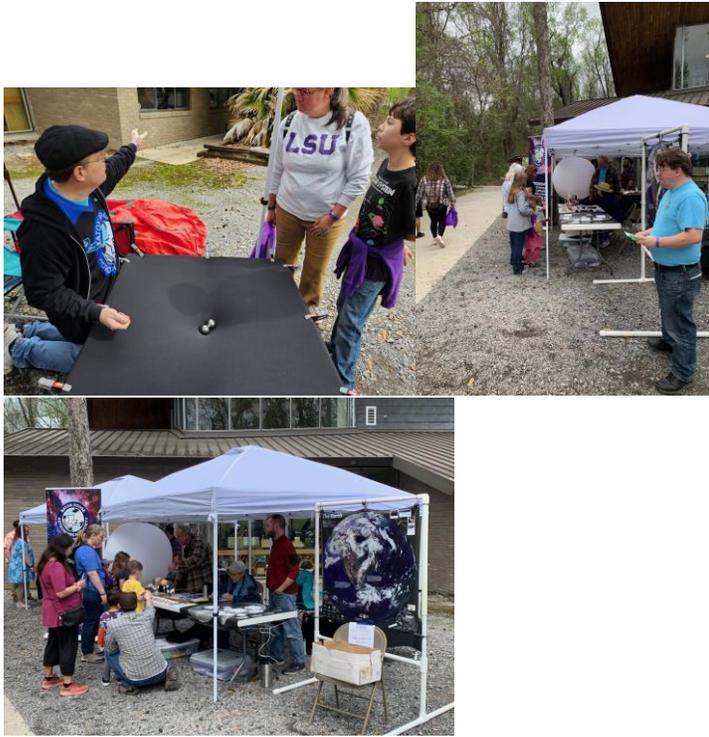


Ros, Ashley, and Ben sharing their knowledge with the students and parents of Westdale Hights Academic Magnet School.



Ben helping make sure Baton Rouge Community College is all set up for the eclipse.

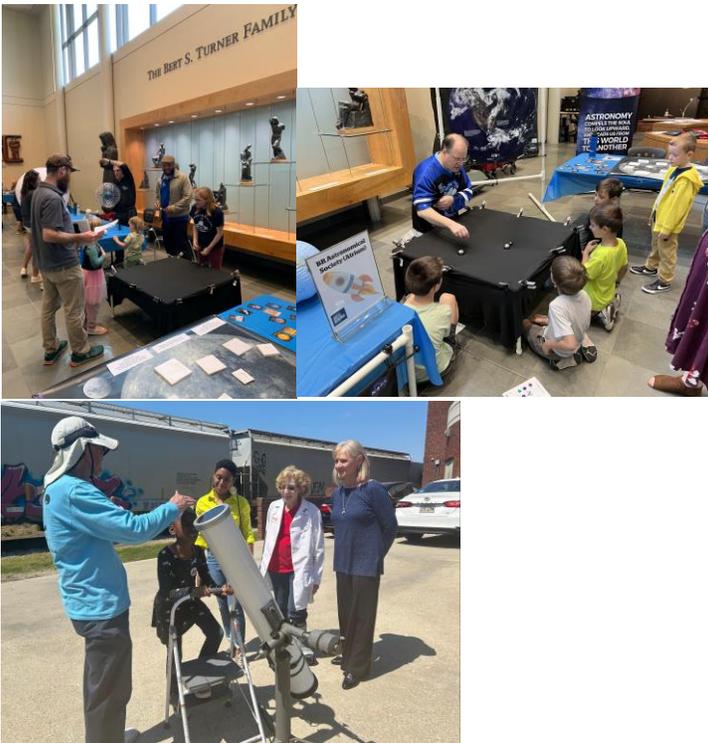
NIGHT VISIONS



Ben, Chris, John, Annete, and Trey representing the club at BREC's Rockin' at the Swamp event.



Ros, Scott, and Ben doing the STEAM event for Oak Grove Primary.



Scott, Troy, Hayley, and Ben wowing patrons at the Louisiana Arts and Science Museum's annual Astronomy Day event. Also thanks to our scope jockey, Chris, for working the crowd outside (Last image courtesy of LASM's social media).



Chris and Scott holding the courtyard at Glasgow Middle School's STEAM night

Secretary's Summary of past meetings

- Meeting called to order, 25 people in attendance.
- Trey and John showed off a new device from Vaionis, the Hestia, which is designed to help people take astronomical photograms using their smart phones.
- Chris Kersey was asked if there was any information from the Observatory that he wanted to share with the club.
- Ben Toman gave a short presentation on how and where to view the upcoming solar eclipse.
- AL awards were handed out
- A raffle was held: The club has decided to start a new-big ticket item raffle that will be ongoing for the next several months. The item being raffled is a classic Celestron 8" electronic telescope with travel case. No information is given about the condition of the electronics, but the tube looks sound. Tickets are \$5 each and members need not be present to win.
- Smaller items were raffled off
- Members took their equipment outside and enjoyed a reasonably clear sky.



Don presenting Scott with an
Astronomical League Award



Win this scope! This lovely vintage 8" Celestron scope with electric drive and wedge is up for raffle for the low low price of \$5 per ticket. No need to be present to win, purchase tickets at the monthly meeting.

Officer's meeting:

- Meeting called to order, 4 members in attendance.
- There was talk of expanding our social media presence. Particular stress has been put upon starting up an Instagram account.
- Discussion of the website was had: we need a new webmaster. The question was put as to whether we wanted to pay to have a professional redesign of the website. After a vote, it was decided that we would transition the website to a more modern, less interactive space and more of a static, informational space.
- The question of reviving the forum was put forth. After discussion, and a vote, it was decided that the club will discontinue the forums.
- Looking over the website, we have noted several minor changes needed to be made, including eliminating the now obsolete information on this month's observing (last updated in December of 2022) and, most urgently, that the membership form must be updated immediately since the current one lists inaccurate information. Attempts to reach the interim webmaster were made immediately to make this change.
- We will add a classifieds section to the newsletter to highlight equipment for sale and to have a place to ask for help from members.
- After some discussion, it was suggested that we will move the officers meetings to a quarterly system instead of the current monthly one. This is to try to eliminate redundancies in discussions and to encourage regular attendance. Day to day aspects and logistics of running the club will be moved to an email discussion so that we can address issues more quickly. Additional meetings should still be called by the President as need demands.
- There have been productive discussions of donating the 8" antique Dobsonian to a good home. Ben is scheduled to finalize this donation with his contact and further information should be forthcoming soon.
- There was a brief discussion of plans to implement changes to the AV setup for our virtual meetings.

Observatory Notes

FRIDAY NIGHT LECTURE SERIES

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

5 April = “Local Sky Survey”

12 April = “The Mercury Astronauts”

19 April = “Available Energies”

26 April = “Unsettling Stories”

EVENING SKY VIEWING

for ages six and older / no admission fee

Fridays (5, 12, 19 and 26 April from 8:30pm to 10pm)

Saturdays (6, 20 and 27 April) from 7:30pm to 10pm

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.

SCIENCE ACADEMY

Saturdays from 10am to 12pm.

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

walk-ins welcome, but 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 April = “Life Cycle of a Star”

13 April = “Periodic Table”

20 April = “Solar Maximum I”

PARTIAL SOLAR ECLIPSE

Monday 8 April 10:30am to 3:30pm

for ages six and older / no admission fee

LIGHT POLLUTION COMMITTEE

Monday 15 April from 6pm to 7pm

for ages fourteen and older / no admission fee

BATON ROUGE ASTRONOMICAL SOCIETY MEETING

Monday 15 April from 7pm to 9pm

for ages fourteen and older / no admission fee

PLUS NIGHT: “The Mystery Box”Saturday 13 April from 7pm to 10pmfor ages six and older / no admission fee / binocular recommended

During Plus Nights and extra features are available to the public...

- *The well-known marshmallow roast takes place at the campfire ring (weather-dependent).
- *Six to eight of HRPO’s collection of over fifty physical science demonstrations will be on hand to perplex and amaze. Which demos will it be?
- *An unaided eye sky tour takes place, showing the public major features of the sky for that month.
- *Filters are inserted into the viewing mechanisms, to show patrons “hidden” details of the Moon, Mars and Jupiter (when they are available).
- *Reveal your age, and be shown any “birth stars” in the sky at that time.

SOLAR VIEWINGSaturday 27 April from 12pm to 2pmfor 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: “Aerospace Engineering I”Saturday 27 April from 3:30pm to 7:30pmfor ages twelve to sixteen. / \$15 each per in-parish registrant; \$18 each per out-of-parish registrant. Advanced registration via WebTrac required [activity #531993].

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.

For more information on any of these talks or activities, please see the HRPO website at <https://hrpo.lsu.edu>

Sky Map



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

Centered on 15 April at 10PM. For an interactive sky map, go to <https://in-the-sky.org>

Quick Picks—Events for April 2024

- Mon 1 [Last Quarter Moon](#)
- Fri 5 [Mars](#) 2.0°N of [Moon](#)
- Sat 6 Occultation of [Saturn](#) by the Moon
- Sun 7 Occultation of [Venus](#) by the Moon
- Sun 7 [Moon](#) Perigee at 358,850 km.
- Mon 8 Total Solar Eclipse - Mag: 1.057
- Mon 8 [New Moon](#)
- Wed 10 [Jupiter](#) 4.0°S of [Moon](#)
- Thu 11 Pleiades 0.4°N of [Moon](#)
- Thu 11 [Mercury](#) in Inferior Conjunction
- Mon 15 Pollux 1.5°N of [Moon](#)
- Mon 15 [First Quarter Moon](#)
- Tue 16 Beehive 3.5°S of [Moon](#)
- Thu 18 Regulus 3.6°S of [Moon](#)
- Fri 19 [Mercury](#) 1.7° of [Venus](#)
- Fri 19 [Moon](#) Apogee at 405,625 km.
- Mon 22 Lyrid Meteor Shower
- Mon 22 Spica 1.5°S of [Moon](#)
- Tue 23 [Full Moon](#)
- Fri 26 Antares 0.3°S of [Moon](#)

Events courtesy of Telescopicious.com

Looking up



Participate in Eclipse Science

By Kat Troche

April is NASA's Citizen Science Month, and there is no shortage of projects available. Here are some [citizen science projects](#) that you can participate in on April 8th, on and off the path of totality right from your smartphone!



Eclipse Soundscapes, ARISA Lab / NASA

Eclipse Soundscapes will compare data from a 1932 study on how eclipses affect wildlife – in this case, crickets. There are a number of ways you can participate, both on and off the path. NOTE: you must be 13 and older to submit data. Participants 18+ can apply to receive the free Data Collector kit. Learn more at: eclipsesoundscapes.org/

Folks that participated in the **GLOBE Eclipse 2017** will be glad to see that their eclipse data portal is now open! With the GLOBE Observer smartphone app, you can measure air temperature and clouds during the eclipse, contributing data to the GLOBE program from anywhere you are. Learn more at: observer.globe.gov/



HamSCI, The University of Scranton / NASA

HamSCI stands for **Ham Radio Science Citizen Investigation**. HamSCI has been actively engaged in scientific data collection for both the October 14, 2023, annular solar eclipse and the upcoming April 8, 2024, total eclipse. Two major activities that HamSCI will be involved in around the solar events will be the **Solar Eclipse QSO Party (SEQP)** and the **Gladstone Signal Spotting Challenge (GSSC)** which are part of the HamSCI Festivals of Eclipse Ionospheric Science. Learn more about these experiments and others at: hamsci.org/eclipse



SunSketcher™

SunSketcher, Western Kentucky University / NASA

If you're traveling to totality, help the **SunSketcher** team measure the oblateness, or shape, of the Sun during the eclipse by timing the flashes of Baily's Beads. You will need a smartphone with a working camera for this, along with something to hold the phone in place - don't forget a spare battery! NOTE: The app will need to run from five minutes *before* the eclipse starts until the end of the eclipse. Any additional phone use will result in Sun Sketcher data loss. Learn more at: sunsketcher.org/

Don't stop at the eclipse - NASA has citizen science projects you can do all year long – from [cloud spotting on Mars](#) to [hunting for distant planets](#)! By contributing to these research efforts, you can help NASA make new discoveries and scientific breakthroughs, resulting in a better understanding of the world around us, from the critters on the ground, to the stars in our sky.

We'll be highlighting other citizen science projects with our mid-month article on the [Night Sky Network](#) page, but we want to wish all you eclipse chasers out there a very happy, and safe solar eclipse! For last minute activities, check out Night Sky Network's [Solar Eclipse Resources section](#)!

Classifieds

- We are looking for somebody capable of helping us to periodically update the Website to make sure that all of the information is correct. We imagine this to not require a great deal of time, the most pressing changes only being needed to be made a few times a year. If interested and capable, please contact one of the officers using the contacts provided.
- Volunteers to help us fulfill our goal of educating the community on the wonders of science and space. Share your expertise with the public and perhaps inspire somebody new to pick up this amazing hobby.

Contact Information

President-----Don Weinell president.braastro@gmail.com

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Secretary-----Scott Cadwallader secretary.braastro@gmail.com

Treasurer-----Trey Anding treasurer.braastro@gmail.com

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YouTube: <https://www.youtube.com/channel/UCS3Xkk1t7C9IRnB8GKrt9MQ>

Facebook: <https://www.facebook.com/Baton-Rouge-Astronomical-Society-122591151112271/>

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

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