

Newsletter of the Baton Rouge Astronomical Society

March 2025

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

https://meet.jit.si/brasmeet

Calendar:

- 5 March, 8PM: Sidewalk Astronomy at Gonzles Library
- 7 March, 6PM: Sidewalk Astronomy at Lutcher Library
- 8 March:
 - o 9AM: Rockin' at the Swamp
 - o 7:30PM: Landolt Star Party
- 10 March, 7PM: Monthly Meeting at HRPO
- 11 March, 6PM: Sidewalk Astronomy at Perkins Rowe
- 13 March, 11PM: Lunar Eclipse at HRPO
- 28 March, 6PM: St. George Star Night
- 6 April, 9AM: Zippity Zoo Fest

Index:

- 1—Vice President's Word
- 2—Outreach Report
- 4—Secretaries Summary
- 5---Observatory Notes
- 8—Skymap
- 9—Quick Picks
- 10—Looking Up
- 15—Contact Info

Vice President's Word

Hi Everyone,

Be sure to come join us on Monday, March 10th at 7pm at the Highland Road Park Observatory for our next monthly meeting. We will be hosting LSU Physics and Astronomy PhD graduate student, Ashley Elliott. Ashley's focus is exo-planet research utilizing optical interferometry and is advised by Dr. Tabetha Boyajian.

Our last meeting was fun! We had a great presentation and discussion about ways to go fast (not necessarily SAFE ways to do so...), got some club business done and had some good social time throughout.

I'd like to identify another scope that needs a good home for one of our multiplemeeting raffles. (Where you don't need to be present to win.) We'll be planning to have that ready to go by the March meeting.

I was happy to hear some feedback that some members would like to get outside and do some observing activities during the meetings sometimes, too, like we've tried in the past. I'll be looking to try something like that in the near future. Maybe even in time for the March meeting!

As always, please give us any feedback you've got. This is YOUR club and we need to know what YOU'D like to be seeing/doing. If you've got ideas, shout 'em out!

Clear Skies, Ben Toman Vice President

Outreach Report

Hi Everyone,

We had to cancel Sidewalk Astronomy at Perkins Rowe due to cloud cover and rain, but our other two events on the same evening went on as planned and fun times were had.

We are always well received at MSA West in Plaquemine and this year was no different. A slight gaff with the lighting had us in the dark outside which, at most times, would be great! However, with the cloud cover, we were relegated to just showing off our demos in the dark. We still had some great interactions with the attendees and awesome feedback, as usual.

Don moved the Sidewalk Astronomy at the library in Gonzales indoors due to clouds and gave a presentation on the planetary "alignment" that had social media buzzing.

We also had a great time, as always, at Westdale Heights Academic Magnet. Mary and her crew are fantastic hosts and it's an event we look forward to each year.

A big thank you to all of the volunteers this month (even if your event got cancelled...it's the thought that counts!): Scott, Roz, Don, Chad, Chris, Annette (she counts even though she did ROCKS because she DID offer to help us instead of her rock-obsessed other half), Steve, Trey, Coy, Ashley and Ben. We couldn't do what we do without your help!

We've got some big events coming up this month and early April and we'll need your help. Both Rockin' At The Swamp and Zippity ZooFest are all day events and we usually schedule shifts throughout the day to cover them. We've also been invited to participate in "Star Night" put on by the St. George School Future Astrophysicists of America club and that sounds like fun! Of course, we'll have our Sidewalk Astronomy events at Perkins Rowe, the Gonzales library, and the Lutcher Library, too. It's gonna be a busy month or so!

Please let me know if you'd like to help out with any of these events. No experience necessary! We'll be there with you to show you the ropes and help you have a great time helping to educate the community about astronomy.

Clear Skies,

Ben Toman

Outreach Chairperson



Upcoming Events

Wednesday, March 5th

8pm-9:30pm

Sidewalk Astronomy at Ascension Parish Library Gonzales

Friday, March 7th

Evening: TBD (probably 6 or 7pm until 9pm or so) Sidewalk Astronomy at Lutcher Library

Saturday, March 8th

9am-4pm

Rockin' At The Swamp

Demos, solar observing, club info

Several people needed for shifts throughout the day

Tuesday, March 11th

6pm-9pm Sidewalk Astronomy at Perkins Rowe

Friday, March 28th

6pm-8pm St. George School "Star Night" Telescope observing and club info

Sunday, April 6th

9am-5pm Zippity ZooFest at the Baton Rouge Zoo Several people needed for shifts throughout the day. Demos, solar observing, club info



From WHAM: top: Chad explores lunar Craters, Scott does Scott things and Ashley hands out information. Middle: Chad and Roz engaging students. Bottom, Ben creates a miniature black hole.





From MSA West: Top: Kickin' back—Ben waits for students to fall into his black hole while Scott gets down with the Tellurion. Bottom: the setup. Not seen: Chris R, Probably off trying to score more rocks (or working the telescope seen at the top...probably both.)

Secretary's Summary

- Meeting called to order, 29 People in attendance
- Guest speaker for the evening was Dr. Colin Turley of LSU Physics and Astronomy department talking about how to go fast. A lovely time was had by all, except for baseballs traveling at relativistic speeds
- A brief discussion was had about the Light Pollution Committee. A vote was taken and it was agreed that the LPC will be disbanded. There still exists an independent group that deals with light pollution under the direction of Chris Kersey: you'll have to talk with him if you're interested in joining up with them.
- Ben talked about new tools from the Night Sky Network that he hopes to be able to start using soon to facilitate scheduling of outreach events.
- The Treckerscope 8 telescope can stay at HRPO until Astronomy Day but then must find a new home. Several options have been presented, including a raffle, a donation, and throwing it off a cliff. If you'd like to buy it from the club outright, please contact Ben as all offers will be entertained.
- A raffle was held
- In response to queries made after the meeting, members are reminded that we have preferred use of HRPO on meeting nights, and that, weather permitting, we try to keep the observatory open for people to hang out and stargaze after (or during) the meeting. This is a great time to bring your own gear out or learn to use some of the club equipment. We'll try to keep it open until a reasonable hour as long as there's interest.



Top: BRAS Guest speaker and LSU's Colin Turley operating the Landolt Refractor during the February Star party put on by the Graduate Students at LSU; scenes from the observing deck. Bottom, Images of Jupiter and Mars taken with LSU equipment by Dr. Turley. The next Landolt Star Party is set for 8 March at 7:30 PM.

Observatory Notes

HIGHLAND ROAD PARK OBSERVATORY March 2025 Public Schedule

{HRPO has no regular office hours on 13 March.}

<u>SCIENCE ACADEMY</u> <u>Saturdays from 10am to 12pm</u> for Cadets aged eight to twelve / \$5 per Cadet per session (\$6 if non-EBR Parish)</u> <u>advanced registration via WebTrac strongly recommended</u> [activity #531990] / parents may stay with or leave Cadet <u>Limit sixteen Cadets per session.</u> 1 March = "Mercury" 8 March = "The Vanguard Spacecraft" 15 March = "Deep Space Objects II" 22 March = "Weather Forecasting"

AMATEUR ASTRONOMY COURSES

Saturdays from 3:30pm to 7:30pm / registration in progress [activity #531992] Registrants must be eighteen or older. / \$15 per registrant (\$18 if non-EBR Parish) These exciting one-day classes are tailor-made to instruct the patron in the use of a personal telescope or binocular for skygazing, or the basics of the unaided-eye Baton Rouge sky! "Learn Your Binocular" = 1 March (postponed from 4 January)

<u>EVENING SKY VIEWING</u> for ages six and older / no admission fee Saturdays (1, 8, 22 and 29 March) from 8:30pm to 10pm Fridays (14 and 28 March) from 7:30pm to 10pm

EDGE OF NIGHT Friday 7 March from 5:30pm to 7:30pm

It's not light. It's not dark. It's that special time called twilight and HRPO wants to introduce you to it!

MERCURIAN ELONGATION

Saturday 8 March from 5:45pm to 7:15pm

Periodically, Mercury reaches its greatest angular separation in the sky (elongation) from the Sun. This is the safest way for amateurs to view Mercury. Come join us at the Burbank Soccer Complex! The planet will appear as a "half-Mercury". The waxing gibbous Moon, Mars, Venus and Jupiter will also be seen.

BATON ROUGE ASTRONOMICAL SOCIETY MEETING

Monday 10 March from 7pm to 9pm

for ages fourteen and older / no admission fee

For over four decades BRAS has educated countless numbers of citizens in the joys of planetary and deep-sky gazing, and factors to consider when buying a pair of binoculars or a telescope. Over the years BRAS members have constructed their own telescopes and photographic platforms; imaged comets; earned observing certificates; and discovered asteroids. Anyone interested in learning more about BRAS is invited to attend.

TOTAL LUNAR ECLIPSE

Thursday 13 March from 11pm to 5am

for ages six and older / no admission fee

While crossing from Leo into Virgo, our Moon will enter Earth's shadows. There are a variety of shadings the Moon can become, dependent on the state of Earth's atmosphere. Join us if you can. This will be the last total lunar eclipse seen in its entirety from Baton Rouge for a long time!

FRIDAY NIGHT LECTURE SERIES

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

<u>14 March = "Wonders of the Spring Sky"</u> BREC Education Curator Amy Northrop will take the audience on a fascinating tour of Baton Rouge's upcoming spring season. She'll highlight the celestial gems that will sparkle throughout those three months—gems visitors will be able to see live if they continue to visit HRPO!

<u>28 March = "Protecting the Power Grid"</u> There are several different ways entire sections of our nation's Grid can be damaged or destroyed. Indeed, it's happened before...at least on a small scale. What about a large-scale event? Many believe it's a matter of when, not if. Are we prepared?

PLUS NIGHT: "Pi in the Sky"

Saturday 15 March from 7pm to 10pm

for 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-depending).

*Seven to ten 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 VIEWING SPECIAL SESSION

Monday 17 March 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 hydrogenalpha wavelength—will take place. Protective clothing and sunscreen are recommended.

RETROCOMPUTING

Friday 21 March from 5:45pm to 9:45pm

For ages twelve and older. Drinks.

This one-time-only open house will showcase the home and work computing of the recent past!

SOLAR VIEWING

Saturday 29 March from 11:30am to 2:30pm

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 hydrogenalpha wavelength—will take place. Protective clothing and sunscreen are recommended.

STEM EXPANSION: "Astrophysics"

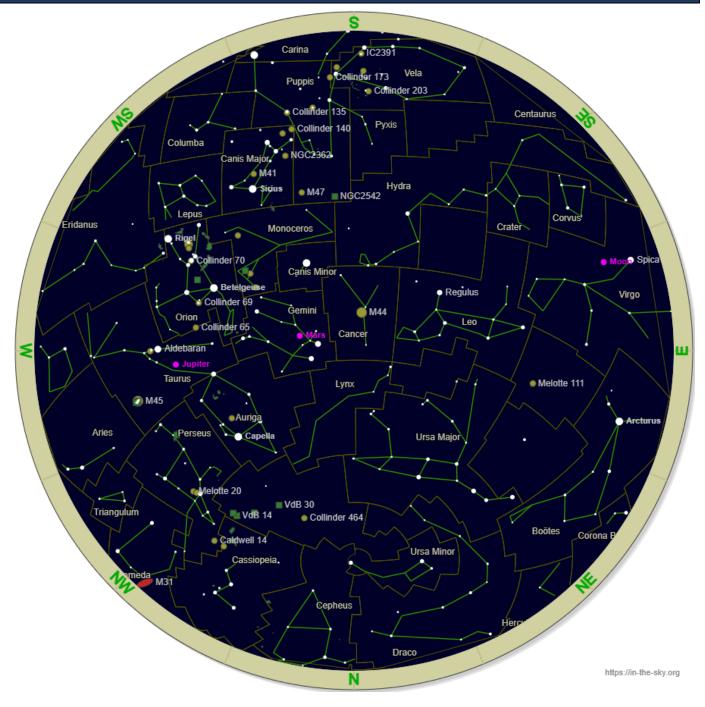
Saturday 29 March from 2:30pm to 6:30pm

for ages twelve to sixteen / \$15 per registrant (\$18 if non EBR-Parish)

advanced registration via WebTrac required [activity #531993]

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

Sky Map



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

Quick Picks—Events for March from Telescopius.com

- Sat 1 <u>Moon</u>361,967 km.
- Tue 4 <u>Mercury</u> at Perihelion
- Wed 5 Pleiades 0.6°S of Moon
- Thu 6 <u>Jupiter</u> 5.6°S of <u>Moon</u>
- Thu 6 First Quarter Moon
- Sat 8 Mercury at Greatest Eastern Elongation 18.20°
- Sat 8 <u>Mars</u> 1.7°S of <u>Moon</u>
- Sun 9 Pollux 2.0°N of Moon
- Mon 10 Beehive 2.6°S of Moon
- Wed 12 Regulus 2.2°S of Moon
- Wed 12 Saturn in Conjunction with the Sun
- Wed 12 <u>Mercury</u> 5.5° of <u>Venus</u>
- Fri 14 Full Moon
- Fri 14 Total Lunar Eclipse Mag: 1.178
- Sun 16 Spica 0.3°N of Moon
- Mon 17 <u>Moon</u> Apogee at 405,754 km.
- Wed 19 Neptune in Conjunction with the Sun
- Thu 20 Vernal Equinox
- Thu 20 Antares 0.5°N of Moon
- Sat 22 Last Quarter Moon
- Sat 22 <u>Venus</u> in Inferior Conjunction
- Mon 24 Mercury in Inferior Conjunction
- Sat 29 Partial Solar Eclipse Mag: 0.938
- Sat 29 <u>New Moon</u>
- Sat 29 <u>Mars</u> 3.9°S of Pollux
- Sun 30 Moon Perigee at 358,127 km

Looking Up



March's Night Sky Notes: Messier Madness

By Kat Troche

March is the start of spring in the Northern Hemisphere; with that, the hunt for Messier objects can begin!

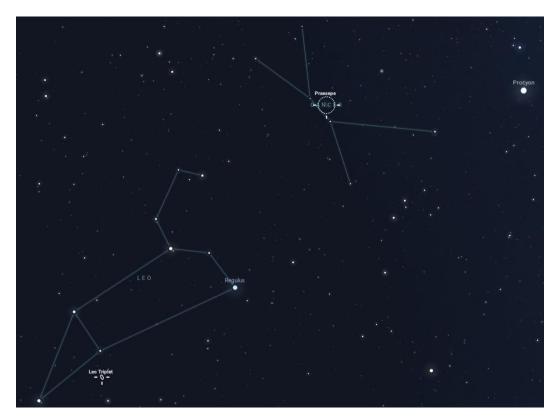


Showing a large portion of M66, this Hubble photo is a composite of images obtained at visible and infrared wavelengths. The images have been combined to represent the real colors of the galaxy. Credit: NASA, ESA and the Hubble Heritage (STScI/AURA)-ESA/Hubble Collaboration; Acknowledgment: Davide De Martin and Robert Gendler

What Are Messier Objects?

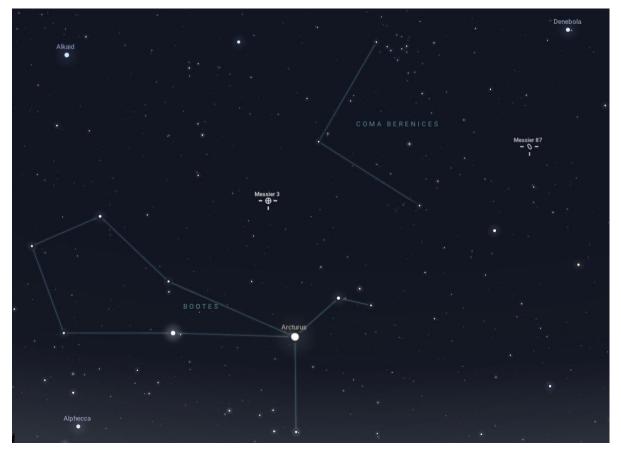
During the 18th century, astronomer and comet hunter <u>Charles Messier</u> wanted to distinguish the 'faint fuzzies' he observed from any potential new comets. As a result, Messier cataloged 110 objects in the night sky, ranging from star clusters to galaxies to nebulae. These items are designated by the letter 'M' and a number. For example, the Orion Nebula is <u>Messier 42</u> or **M42**, and the Pleiades are <u>Messier 45</u> or **M45**. These are among the brightest 'faint fuzzies' we can see with modest backyard telescopes and some even with our eyes.

Stargazers can catalog these items on evenings closest to the new moon. Some even go as far as having "Messier Marathons," setting up their telescopes and binoculars in the darkest skies available to them, from sundown to sunrise, to catch as many as possible. Here are some items to look for this season:



M44 in Cancer and M65 and 66 in Leo can be seen high in the evening sky 60 minutes after sunset. Credit: Stellarium Web

Messier 44 in Cancer: The Beehive Cluster, also known as Praesepe, is an open star cluster in the heart of the Cancer constellation. Use Pollux in Gemini and Regulus in Leo as guide stars. A pair of binoculars is enough to view this and other open star clusters. If you have a telescope handy, pay a visit two of the three galaxies that form the Leo Triplet - M65 and M66. These items can be seen one hour after sunset in dark skies.



Locate M3 and M87 rising in the east after midnight. Credit: Stellarium Web

<u>Messier 3</u> Canes Venatici: M3 is a globular cluster of 500,000 stars. Through a telescope, this object looks like a fuzzy sparkly ball. You can resolve this cluster in an 8-inch telescope in moderate dark skies. You can find this star cluster by using the star Arcturus in the Boötes constellation as a guide.

Messier 87 in Virgo: Located just outside of Markarian's Chain, M87 is an elliptical galaxy that can be spotted during the late evening hours. While it is not possible to view the <u>supermassive black</u> hole at the core of this galaxy, you can see M87 and several other Messier-labeled galaxies in the Virgo Cluster using a medium-sized telescope.



Locate M76 and M31 setting in the west, 60 minutes after sunset. Credit: Stellarium Web

<u>Messier 76</u> in Perseus: For a challenge, spot the Little Dumbbell Nebula, a planetary nebula between the Perseus and Cassiopeia constellations. With an apparent magnitude of 12.0, you will need a large telescope and dark skies. You can find both M76 and the famous <u>Andromeda Galaxy</u> (<u>M31</u>) one hour after sunset, but only for a limited time, as these objects disappear after April. They will reappear in the late-night sky by September.

Plan Ahead

When gearing up for a long stargazing session, there are several things to remember, such as equipment, location, and provisions:

- **Do you have enough layers to be outdoors for several hours?** You would be surprised how cold it can get when sitting or standing still behind a telescope!
- Are your batteries fully charged? If your telescope runs on power, be sure to charge everything before you leave home and pack any additional batteries for your cell phone. Most people use their mobile devices for astronomy apps, so their batteries may deplete faster. Cold weather can also impact battery life.
- Determine the **apparent magnitude** of what you are trying to see and the **limiting magnitude** of your night sky. You can learn more about apparent and limiting magnitudes with our <u>Check Your Sky Quality with Orion</u> article.
- When choosing a location to observe from, select an area you are familiar with and bring some friends! You can also <u>connect with your local astronomy club</u> to see if they are hosting any Messier Marathons. It's always great to share the stars!

You can see all 110 items and their locations with NASA's <u>Explore the Night Sky interactive map</u> and the <u>Hubble Messier Catalog</u>, objects that have been imaged by the Hubble Space Telescope.

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

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