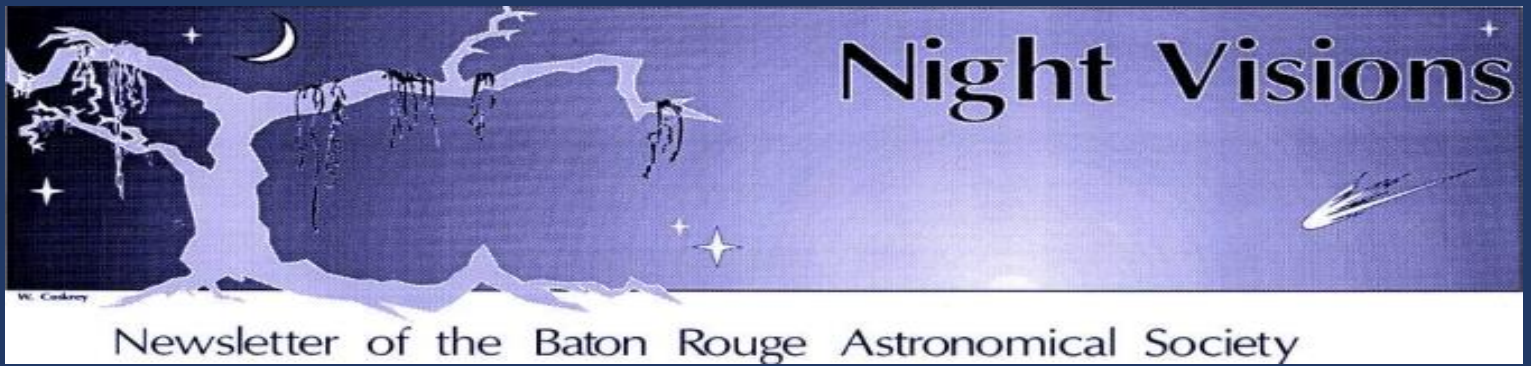




May 2025

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

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

Calendar:

- 28 April, 6PM: Quarterly Planning Meeting, HRPO
- 30 April, 7PM: Astronomy on Tap at the Varsity
- 3 May: International Astronomy Day
 - 3-11PM: HRPO
 - 9PM: Landolt Observatory
- 4 May: 1PM, LASM May the Fourth be with you event
- 6 May, 7PM: Sidewalk Astronomy at Perkins Rowe
- 12 May, 7PM: General Meeting, HRPO
- 16 June, 9AM: Little Lamb's Mother's Day Out Kid's Camp in Lafayette
- 28 June, TBD: Dino Days at LASM

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Vice President's Word

Hi Everyone,

Well, it's that time of year again and you're back to having an absentee President for a few months as Don heads up North to spend time at Fort Abraham Lincoln as an interpretive guide.

When I first joined the club back in 2009, they used to take the Summer off from having meetings altogether because people would leave for vacations and it was just too hot and bright outside to do much observing. However, when I became Vice President I suggested we try having meetings anyway just for those that were still around in the Summer and at least interested in getting together. As it turned out, we continued to have almost as many attendees at meetings in the Summer as we did throughout the year so we kept having them year-round.

That being said, 3 more meetings each year makes it even harder for the Vice President when it comes to scheduling programs for our meetings. We've actually been having some great luck with the weather for some of our meetings where we planned actual observing activities. We all got some great views of the Moon occulting Mars and this past month we had more than a dozen members stay until around 10pm with scopes and imaging devices set up. It really was like a mini star party!

As I continue to hound astronomers and physicists around our area to come speak to the club, I'm also continuing to think of ways to have more of these "activity" meetings, too. We had about 30 members at the last meeting which is a LOT for one of our meetings where we weren't having food! I'd like to keep building on that so let me/us know if there is anything YOU'D like to be doing or hearing about at our meetings so we can get more ideas up and running.

It's easy to sit back and let the officers run things, but remember this is YOUR club. We want it to be fun for everyone and we also don't want to get stale or boring. I hope you've been enjoying the programming so far and I'm hoping to get some more fun stuff going this year.

Finally, I definitely think we should try to keep observing as something we plan to do at each club meeting. That gets a little tougher in the Summer months and it may have to take a break like Sidewalk Astronomy, but we'll at least try it again after our upcoming May meeting on the 12th so start working your mojo for clear skies that night!

Clear Skies,
Ben Toman



Don and Scott Loque set up for the Vacherie Library Sidewalk Astronomy event.

Outreach Report

Hi Everyone,

We had a busy month for April! Between our visit to the Baton Rouge Zoo, St George School, Port Hudson Historical Site and our Sidewalk Astronomy events, we saw several hundred people!!

We've got a pretty good system going for outreach and we'd love to have you come join in the fun. As we move into the slower Summer months, take a look at our smaller list of opportunities and let us know if you'd like to come help out. It's super easy and it's a great way to actually use your interest in astronomy to help educate others in the community.

A huge thank you to our volunteers that helped out this month: Roz, Susan, Chris R., Chris K., Scott L., Scott C., Don, Coy, Chad, David and Ben. It's a pretty good list, but still only about 10% of the club. We'd love to get some more participation in the outreach events even if you can only drop by for an hour or so.

I'd like to do some more Outreach training/brainstorming sessions in these slower months, so be on the lookout for an announcement of future dates for that. In the meantime, take a look at the list below and come join us for some fun!

Clear Skies,
Ben Toman

NIGHT VISIONS



From Perkins Rowe: Chad, Ben, Coy, Don, & Roz share the views with patrons of Perkins Rowe, including this first-time telescope viewer!

Upcoming Events

Saturday, May 3rd

3pm-11pm

International Astronomy Day

Highland Road Park Observatory

(If you'd like to volunteer for this event, you must speak to Chris Kersey, the manager of the HRPO)

Sunday, May 4th

1pm-5pm

May the 4th Event for First Free Sunday

Louisiana Art and Science Museum

Tuesday, May 6th

7pm-9pm

Sidewalk Astronomy at Perkins Rowe

(Last one for the Summer!)

Monday, June 16th (Tentative)

9:30am-11:30am

Little Lambs Mother's Day Out Kid's Camp in Lafayette

Saturday, June 28th

Time TBD

Dino Days at the LASM



More rain, but we keep shining! Roz, Scott, and Ben help set up simulated view of the moon at the St. George STEM night.



Rain or Shine, but mostly rain, scenes from the Zoo: Susan and Chad do exhibits, Coy delivers a deep dive on the sun, and Chris, Scott, Roz, and Coy find a way to get Ben out of the picture to take this group photo.

Secretary's Summary

- Meeting Called to order, 28 people in attendance, one online
- Don talked about the months outreaches and the value it brings to the club
- Bary Simon of PAS was introduced to talk about what's been happening with the Deep South Star Gaze
- Chris spoke about the proposed changes to the BREC park system
- A raffle was held for the 8" Orange tube SCT
- Meeting adjourned, many members stuck around to observe and image



Top: Ben introduces the next set of students, Chris shows the photosphere, and Scott shows the chromosphere.

Bottom: Susan explains the scale of the solar system, Chad shows off the tellurion, Roz picks through craters, and Ben finds a shady way of doing solar astronomy, with the Seestar. Not seen, Annette Raby—honestly, we're worried: sure, he's working the scopes today, but we think Chris might be back on the hard stuff, which is what he says he'll be doing instead of Astronomy Day.

Observatory Notes

Nothing submitted. See

<https://www.brec.org/calendar/2025/05?park=190> for a complete list of upcoming BREC events at HRPO.

Sky Map



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

Quick Picks—Events for May, from telescopius.com

- Fri 2 Pollux 2.1°N of [Moon](#)
- Sat 3 [Mars](#) 2.1°S of [Moon](#)
- Sat 3 Beehive 2.5°S of [Moon](#)
- Sun 4 [Mars](#) 0.3°N of Beehive
- Sun 4 [First Quarter Moon](#)
- Sun 4 Eta-Aquarid Meteor Shower
- Mon 5 Regulus 2.0°S of [Moon](#)
- Sat 10 Spica 0.4°N of [Moon](#)
- Sat 10 [Moon](#) Apogee at 406,245 km.
- Mon 12 [Full Moon](#)
- Tue 13 Antares 0.3°N of [Moon](#)
- Sat 17 [Uranus](#) in Conjunction with the Sun
- Tue 20 [Last Quarter Moon](#)
- Thu 22 [Saturn](#) 2.8°S of [Moon](#)
- Fri 23 [Venus](#) 4.0°S of [Moon](#)
- Sun 25 [Moon](#) Perigee at 359,023 km.
- Mon 26 [New Moon](#)
- Thu 29 [Mercury](#) in Superior Conjunction
- Fri 30 Pollux 2.3°N of [Moon](#)
- Sat 31 Beehive 2.2°S of [Moon](#)
- Sat 31 [Mercury](#) at Perihelion
- Sat 31 [Venus](#) at Greatest Western Elongation - 45.90°

Check [stellarium.com](#) for exact times for your location.

Looking up



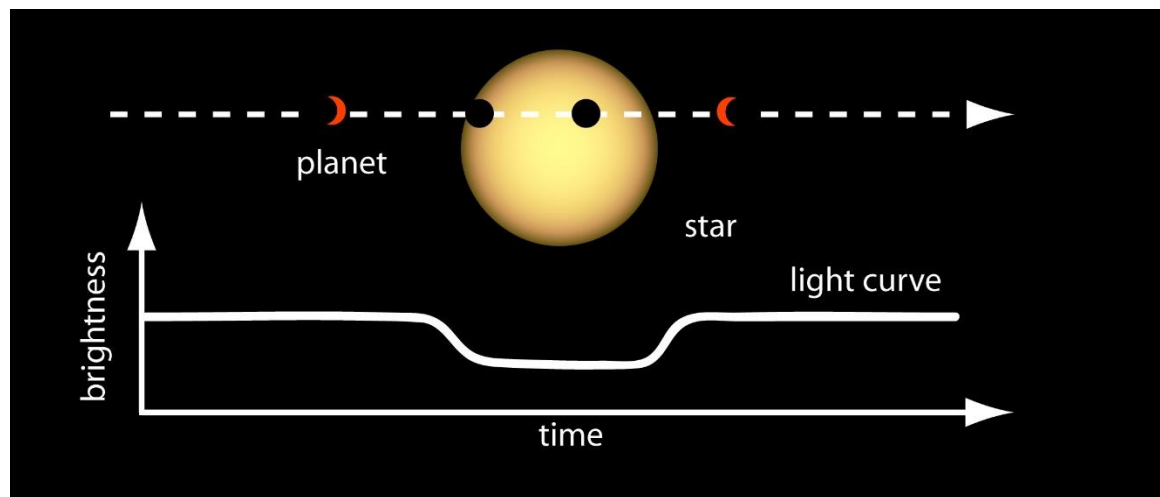
May's Night Sky Notes: How Do We Find Exoplanets?

By: Dave Prosper

Updated by: Kat Troche

Astronomers have been trying to discover evidence that worlds exist around stars other than our Sun since the 19th century. By the mid-1990s, technology finally caught up with the desire for discovery and led to the first discovery of a planet orbiting another sun-like star, [Pegasi 51b](#). Why did it take so long to discover these distant worlds, and what techniques do astronomers use to find them?

The Transit Method

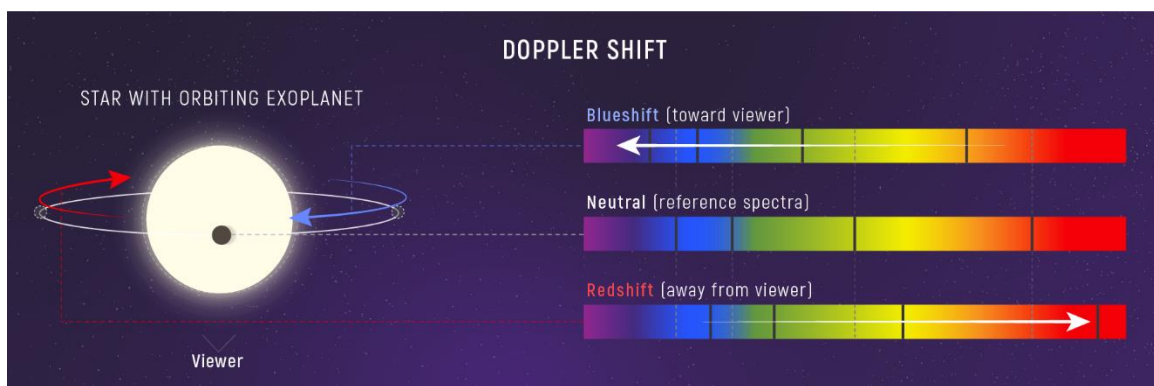


A planet passing in front of its parent star creates a drop in the star's apparent brightness, called a transit. Exoplanet Watch participants can look for transits in data from ground-based telescopes, helping scientists refine measurements of the length of a planet's orbit around its star. Credit: NASA's Ames Research Center

One of the most famous exoplanet detection methods is the **transit method**, used by [Kepler](#) and other observatories. When a planet

crosses in front of its host star, the light from the star dips slightly in brightness. Scientists can confirm a planet orbits its host star by repeatedly detecting these incredibly tiny dips in brightness using sensitive instruments. If you can imagine trying to detect the dip in light from a massive searchlight when an ant crosses in front of it, at a distance of tens of miles away, you can begin to see how difficult it can be to spot a planet from light-years away! Another drawback to the transit method is that the distant solar system must be at a favorable angle to our point of view here on Earth – if the distant system's angle is just slightly askew, there will be no transits. Even in our solar system, a transit is very rare. For example, there were two transits of Venus visible across our Sun from Earth in this century. But the next time Venus transits the Sun as seen from Earth will be in the year 2117 – more than a century from now, even though Venus will have completed nearly 150 orbits around the Sun by then!

The Wobble Method



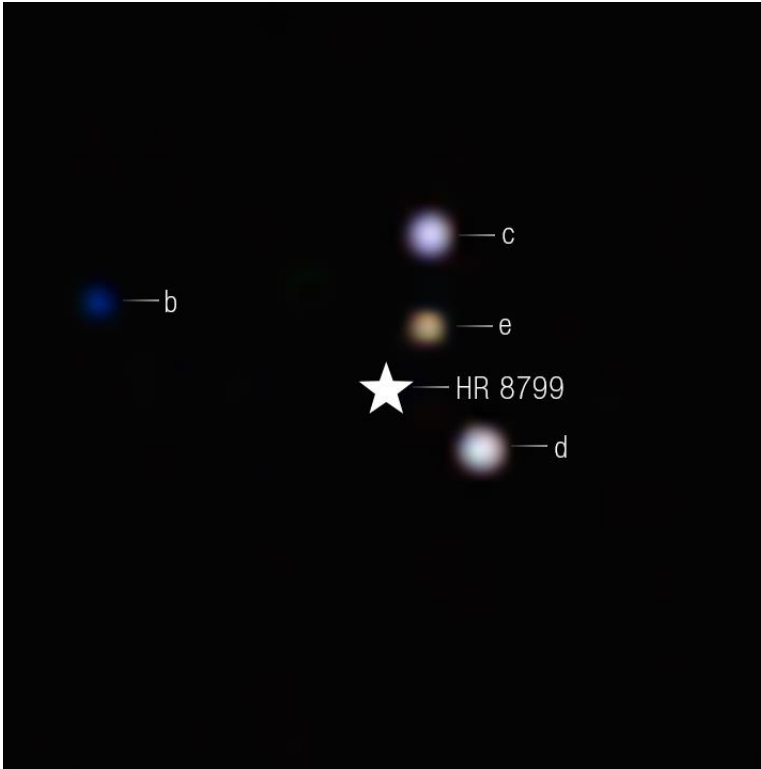
As a planet orbits a star, the star wobbles. This causes a change in the appearance of the star's spectrum called Doppler shift. Because the change in wavelength is directly related to relative speed, astronomers can use Doppler shift to calculate exactly how fast an object is moving toward or away from us. Astronomers can also track the Doppler shift of a star over time to estimate the mass of the planet orbiting it. Credit: NASA, ESA, CSA, Leah Hustak (STScI)

Spotting the Doppler shift of a star's spectra was used to find Pegasi 51b, the first planet detected around a Sun-like star. This technique is called the **radial velocity or "wobble"**

method. Astronomers split up the visible light emitted by a star into a rainbow. These spectra, and gaps between the normally smooth bands of light, help determine the elements that make up the star. However, if there is a planet orbiting the star, it causes the star to wobble ever so slightly back and forth. This will, in turn, cause the lines within the spectra to shift ever so slightly towards the blue and red ends of the spectrum as the star wobbles slightly away and towards us. This is caused by the [blue and red shifts](#) of the planet's light. By carefully measuring the amount of shift in the star's spectra, astronomers can determine the size of the object pulling on the host star and if the companion is indeed a planet. By tracking the variation in this periodic shift of the spectra, they can also determine the time it takes the planet to orbit its parent star.

Direct Imaging

Finally, exoplanets can be revealed by **directly imaging** them, such as this image of four planets found orbiting the star HR 8799! Space telescopes use instruments called **coronagraphs** to block the bright light from the host star and capture the dim light from planets. The Hubble Space Telescope has [captured images of giant planets orbiting a few nearby systems](#), and the James Webb Space Telescope [has only improved on these observations](#) by uncovering more details, such as the colors and spectra of exoplanet atmospheres, temperatures, detecting potential exomoons, and even scanning atmospheres for potential biosignatures!



*Image taken by the James Webb Space Telescope of four exoplanets orbiting HR 8799.
Credit: NASA, ESA, CSA, STScI, Laurent Pueyo (STScI), William Balmer (JHU),
Marshall Perrin (STScI)*

You can find more information and activities on [NASA's Exoplanets](#) page, such as the [Eyes on Exoplanets](#) browser-based program, [The Exoplaneteers](#), and some of the [latest exoplanet news](#). Lastly, you can find more resources in our [News & Resources section](#), including a [clever demo](#) on how astronomers use the wobble method to detect planets!

The future of exoplanet discovery is only just beginning, promising rich rewards in humanity's understanding of our place in the Universe, where we are from, and if there is life elsewhere in our cosmos.

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