

# SIDEREAL TIMES

Austin Astronomical Society  
*keeping astronomy weird since 1969*

## MONTHLY MEETING

Friday, March 8, 2019

ETC 2.136 - UT Campus  
Engineering Teaching Center  
Dean Keeton and Speedway

## NO PRACTICAL ASTRONOMY

7:30 PM  
GENERAL ASSEMBLY

### Featured Speaker

Richard Nugent: Richard will talk to us about the why and the how of doing occultation observations and how armatures can participate and make valuable contributions to this venerable science.



## PRESIDENT'S NOTES

By Tim Brown, President

This years central Texas weather has simply refused to co-operate with our clubs and our individual plans for observing. At best we get a hint of stars through "sucker holes" or possibly brief, fleeting moments of clearing.

Unfortunately, this weather syndrome has doomed many of our public and members-only events to be cancelled or moved inside.

The crummy observing conditions of the last year+ have made it difficult for us to appreciate the possibilities of our new and still developing opportunities at Pedernales Falls and Inks Lake State Parks. Our members haven't had a real opportunity to experience nights under the stars with AAS friends and visitors at our new viewing sites. That's the only way for us to know if these state park's will be observing venues for the long-term.

Are they accessible? Do they have dark enough skies for serious observers? Are they close enough to Austin that we'll feel they're an easy drive? Take your scope or just your eyeballs and try them out. Then let the EC and the whole club know what you think of your experience and offer any suggestions you have for improvement.

Our search team presented a proposal to Pedernales Falls that will allow AAS to locate a semi-permanent structure to house our 25" dob and provide room for educational and fun activities on rainy nights. For months it's been working its way though the labyrinth halls of state government for final approval. We hope for a decision very soon.



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*Banner: Feb. 2019 Image of the Month: Rathijit Banerjee- Jan. Lunar Eclipse*



# PRESIDENT'S NOTES CONTINUED

## CALENDAR OF EVENTS

### Star Parties

#### Pedernales Falls for AAS Members

**Today, right now, every AAS member is welcome to observe at the park on any night that the Park Service holding an official astronomy event. You're welcome to stay as late as you like (Only the park entrance fee is charged).**

Four times a year we can have members only functions that have the same access rules, but at no charge to AAS members. Get out there and give those skies a test.

#### Public Star Parties

AAS presents public star parties every month alternating between Pedernales and Inks Lake Sate Parks.

If outreach is your passion join Joyce Lynch (AAS outreach Chair) and other regulars for a night of sharing your love of astronomy with campers.

We have a fantastic opportunity to utilize these new sites and test our partnerships with the State Park system for improving our outreach opportunities and providing our members with a close-in "pretty-dark" site to observe.

In April we'll hold the election of the Executive Committee who will serve for 2019-2020 season. Be sure to read Dawn's email. If you are ready to help guide the club in this new era be sure volunteer and help bring your vision to life

Clear Skies,  
Tim

"For my part I know nothing with certainty, but the sight of stars makes me dream". (Vincent Van Gogh)

8 Mar. 2019

NO Practical Astronomy  
General Assembly Meeting  
7:30 PM

@ ETC 2.136 - UT Campus  
Engineering Teaching Center  
Dean Keeton and Speedway

23 Mar. 2019

Public Star Party  
7:30 PM - 10:00 PM  
@ Inks Lake State Park

30 Mar. 2019

Texas Night Sky Festival  
12:00 PM - 11:00 PM  
@ Dripping Springs

1 Apr 2019

Executive Committee Meeting  
7:00 PM - 8:30 PM  
@ Tim Brown's House

12 Apr. 2019

Practical Astronomy  
6:30 PM  
General Assembly Meeting  
7:30 PM  
@ ETC 2.136 - UT Campus  
Engineering Teaching Center  
Dean Keeton and Speedway

6 May 2019

Executive Committee Meeting  
7:00 PM - 8:30 PM  
@ Tim Brown's House

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## AAS AFFILIATIONS



<http://darksky.org/>



<https://www.astroleague.org/>



<https://nightsky.jpl.nasa.gov>



<http://www.tsgc.utexas.edu/>

# VOTE ON BYLAWS AMENDMENTS AT THE MARCH 8TH GA MEETING

At the February General Assembly meeting, we were unable to vote on the proposed bylaws amendments due to the lack of a quorum. The vote is now scheduled for the next GA meeting this coming Friday, March 8.

The text of the amendments is available [here](#).

For reference, the current bylaws are available [here](#).

Some of the amendments relate to changing election procedures, for officers and for future bylaws amendments, including the end of absentee voting.

There are several clarifications of membership issues.

Also, there are 2 corrections of typographical errors in the current version of the bylaws.

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## AAS GUEST SPEAKER IN MARCH

**Our featured speaker will be: Richard Nugent**

**Topic: Occultation Astronomy**

For our speaker this month, we are lucky to have from among our own membership, a true expert in occultation science. Richard Nugent graduated from the University of Florida in 1979 with B.S. and M.S. degrees in Astronomy specializing in positional astronomy. His graduate work was with the world renowned astronomer, astrometrist and the father of modern astrometry Heinrich K. Eichhorn. Richard had a long career with NASA, and for many years has been the Executive Secretary fo the International Occultation Timing Association (IOTA). He has traveled the world on over 120 expeditions collecting scientific data on solar eclipses and stellar eclipses (occultations). Richard will talk to us about the why and the how of doing occultation observations and how armatures can participate and make valuable contributions to this venerable science.

# JOIN THE EXECUTIVE COMMITTEE

## The Executive Committee Wants YOU!

Put your ideas, passion and leadership to use!

Join the Executive Committee of the Austin Astronomical Society. Help plan meeting programming. Interact with youth and show them the stars. Connect with your fellow members. Self nominate, or suggest a member you know, for one of the following positions:

- **President**
- **Vice President**
- **Secretary**
- **Treasurer**
- **Communications Chair**
- **Equipment Chair**
- **Member Services Chair**
- **Outreach Chair**
- **Members-at-Large (6 positions)**

For more information about the responsibilities of the above positions please visit the [bylaws](#) section of the website.

Nominations can be made, via email [nominate@austinastro.org](mailto:nominate@austinastro.org), now through end of day March 29, with the ballot posted on our website some time thereafter. Elections will take place at the April 12 general assembly meeting. All elected officers will serve on the Executive Committee for the term June 1, 2019 to May 31, 2020.

As VP, I'm responsible for bringing in our monthly speakers. There is no better feeling than getting someone that you've wanted to hear for a long time come in and really connect with the audience so that you're forced to cut off Q&A because folks won't stop asking questions.

- **Terry Phillips, Vice President**

Without doubt the greatest pleasure is working with and coordinating the efforts of EC volunteers, each of whom are dedicated to helping the club thrive. What a pleasure it has been to work with the year's EC members to assure great speakers and fun educational events. The President is charged to identify targets for improvement and then to assist Executive Committee members by providing help when needed. Together we encourage anything that makes the club enjoyable for our members and our outreach efforts successful in the community.

- **Tim Brown, President**

I enjoyed being a member-at-large for the past year because I was able to have a much better perspective on how the club works, as well as be able to have a say on major decisions. Additionally, it is nice to be one of the first to know about all of the events and parties as well.

- **Jessica Cofrancesco, Member-at-Large**

In this last year I was able to fulfill almost every outreach request received. That is a huge accomplishment. I hope my successor can come up with new and creative ways to get more people involved in outreach, so that trend can continue. One person cannot do it all and we can give so much more, to the community, as a team.

- **Joyce Lynch, Outreach Chair**

# THE ANDROMEDA GALAXY

By Michael E. Marotta

If I had known that it was this easy, I would have seen the Andromeda Galaxy 60 years ago. In Turn Left at Orion Guy Consolmagno tells of first sighting the stunning double star Albireo from Fort Lee, New Jersey, with a 3-inch refractor. Since reading that in early 2015, I have been even more enthusiastic about backyard astronomy in the city. Seeing the Andromeda Galaxy for the first time just reinforced that passion.



*Credit: Nathan Morgan*

The night was predicted to be clear, and I did not have to go to work the next day. My preferred website for planning my viewing is "Rise/Set/Transit Times for Major Solar System Bodies and Bright Stars" from the U.S. Naval Observatory (<https://aa.usno.navy.mil/data/docs/mrst.php>). According to that, Mars would be past the meridian and the view to the west is not good for me because of houses. Orion was not going to be high enough in the east because of trees. From my National Geographic map of the heavens and my Edmund Scientific star finder, I found that M3, an easy large globular cluster, would be below my visible horizon to the north because of the city of Austin. But I was determined just to go out anyway. On a lark, I googled "locate Andromeda Galaxy tonight" and EarthSky.com assured me that it would be easy. It was.

The recommendation was to find the galaxy in a "dark sky" and that was not going to happen one mile from the South Park Meadows shopping mall. But I figure that I could start with my binoculars (Bushnell 12x42). And it was right there. I had my 5-1/4 inch reflector, a Celestron 130EQ, set up. The finder broke a couple of months ago. (It just burned out and the rocker switch failed, just one of many small problems with this telescope over the past four years. About a month later, Celestron replaced the finder gratis.) So, I spent about 15 or 20 minutes just lining up the tube and scanning back and forth, but soon enough there it was, as described: a hazy patch about the size of a full moon. I used both a 10mm (65 power) and 10 mm with 2x Barlow (130 power). Because the view was almost directly overhead, there was very little apparent motion as I switched oculars. Once I found the Andromeda Galaxy I never lost it. I

When I came indoors, I turned to Burnham's Celestial Handbook. The Andromeda Galaxy was probably known to the Persians from 900 AD. It was recorded as a stellar cloud by Abd al-Rahman al-Sufi in about 964 AD. (See, also, Wikipedia for "Al-Sufi" and "Book of Fixed Stars.") It was always a hazy patch. Although it was first sighted in a telescope in 1615, our view of it only comes from photographic imaging with the 100-inch Mount Wilson after 1923. Since then, it has been imaged with much smaller telescopes and much better cameras.

WHEN IS THE NEXT

# TOTAL LUNAR SUPER BLOOD MOON ECLIPSE?

By Rob Pettengill, Ph.D.

These are more common than you might think. Journalists love sensational sounding names and headlines because readers like them. A relatively common event is just more interesting when described with words like “blood” and “super”.

A Blood Moon is a slang expression for a Total Lunar Eclipse.

A Super Moon is a slang expression for a Full Moon at Perigee Syzygy. Perigee means that the moon is at the closest point in its elliptical orbit. A perigee moon appears only about 14% larger than when the moon is furthest (apogee) - not very super! The illusion of the moon appearing larger near the horizon than overhead is more striking than this.

Syzygy means that the Sun, Earth, and Moon are all in a straight line when viewed perpendicular to the earth's orbital plane. All full moons occur at a syzygy as well as solar and lunar eclipses.

Perigee occurs at an exact moment in time; I will use a rule of thumb that any full moon within 10% of perigee is a Super Moon. With astronomical precision, we are looking for within 90% of Perigee Total Lunar Eclipses. Something like this one from last January:



## When is the next one?

Eclipse expert Fred Espenak has done the hard work.

Using data from two of his tables at:

NASA's [Lunar Eclipse Page](#) and AstroPixels [Full Moon at Perigee \(Super Moon\): 2001 to 2100](#) page.

The next Super Moon Total Lunar Eclipse (90% of Perigee Total Lunar Eclipse) will be: **2021 May 26**

## How common are they?

Between 2001 and 2100 there will be 85 Total Lunar Eclipses and 28 Super Moon Total Lunar Eclipses. Almost 1/3 of Total Lunar Eclipses in the 21st century will occur during a Super Moon. They occur on average about 3.5 years apart. Here is a list of all of them in the 21st century:

2021 May 26  
2022 May 16  
2032 Oct 18  
2033 Oct 08  
2036 Feb 11  
2037 Jan 31  
2040 May 26  
2050 Oct 30  
2051 Oct 19  
2054 Feb 22  
2055 Feb 11  
2058 Jun 06  
2068 Nov 09  
2069 Oct 30  
2072 Mar 04  
2073 Feb 22  
2076 Jun 17  
2087 Nov 10  
2090 Mar 15  
2091 Mar 05  
2094 Jun 28



# MARCH OBSERVING TARGETS

By Brian Cuthbertson

The ancients seemed, for whatever reason, to view the sky as some sort of celestial zoo. The constellations run the gamut of the animal kingdom, from birds to bears to rams and fishes, and even to a few species that haven't yet washed up on modern beaches. This month we visit a couple of these beasts: Hydra the Sea Snake and Leo the Lion. But unlike earthbound zoos, hunting is encouraged here - as long as it's with a telescope. Enjoy!

## V Hydrae rating: EASY

### Semi-regular carbon star

RA 10h 51.6m Dec -21d 14.9' (2000)

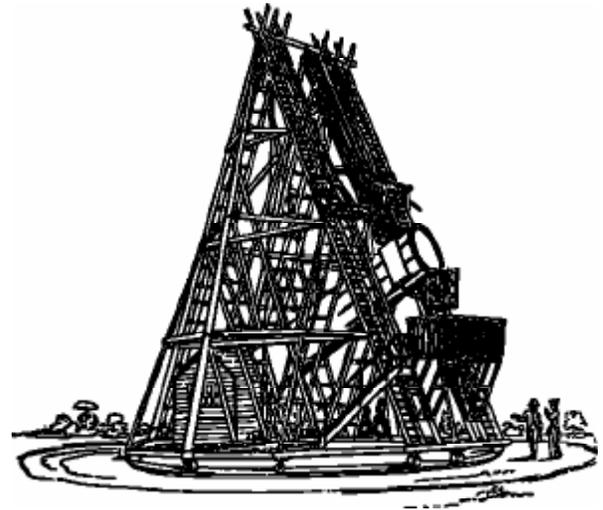
Magnitude range 6.9-9

V Hydrae is a red coal about 5 degrees south of 3rd-magnitude NU Hydra. Actually, it's closer to Alpha Crateris (Alkes, mag. 4.1), which is just over the border just 3.5 degrees NE of V. At a distance of 1300 light-years, V is approaching us about 9 miles per second.

Discovered to be variable in 1888, V is one of the reddest stars in the sky, rivaling MU Cephei and R Leporis. Early observers called it "brown red" and a "most magnificent copper red".

V is a rare low temperature carbon star, and one of the brightest of its kind. Carbon stars are red giants, similar to Betelgeuse and Antares, but which appear even redder due to the relative abundance of carbon in their atmospheres. The carbon-rich molecules act as a red filter, blocking the shorter (bluer) wavelengths of the star's light.

Like many of its relatives, V varies semi-regularly, with a nominal period of about 17 months. But about every 18 years dust condenses around the star, making it dim to as faint as magnitude 12. The



*William Herschel's telescope. From a drawing in 'The Imperial History of England, comprising the entire work of D. Hume,' David Hume, 1891. Credit: [openclipart.org](http://openclipart.org)*

most recent dimming occurred in the mid-1990s; since then V has slowly recovered its brightness.

V has a bi-polar (two-sided) outflow of material that's been observed at infrared and radio wavelengths, suggesting structures seen in planetary nebulae. This is perhaps a sign that V is starting its expected transition from the red-giant stage to a planetary nebula. Stay tuned.

## HCG 44 rating MEDIUM

### compact galaxy group in Leo

RA 10h 17.9m Dec +21d 48.7' (2000)

Magnitude 11.0 group dia 20'

In 1982 Paul Hickson first published his list of compact galaxy groups, based on a systematic search of the Palomar Sky Survey red prints, which cover the entire sky north of -32 degrees. To qualify, each group had to contain at least 4 members in a compact configuration isolated from other galaxies.

## MARCH OBSERVING TARGETS, CONTINUED

One of Hickson's compact galaxy groups, HCG 44, sits in the sickle-shaped head of Leo the Lion, roughly halfway between 2nd-magnitude Gamma Leo to the south and 3rd magnitude Zeta to the North. It consists of 4 galaxies, NGC 3185, 3187, 3190 and 3193.

In the group, NGC 3190 is the dominant galaxy while NGC 3187 is the most challenging, generally not visible in scopes smaller than 10 inches. For this reason, the group is effectively a linear threesome for many observers. NGC 3190 (11th mag., 3x1') is in the middle. To its SW is NGC 3185 (mag. 12.3 and 1.5x1'), and at the other end is NGC 3193 (mag. 11.4 but just 1' in diameter). These three can be an attractive sight on a good night in the low-power field of medium to large amateur scopes.

NGC 3190 is a nearly edge-on spiral with a tiny oval core much brighter than its halo. The core contains a stellar nucleus, and both the core and nucleus are right against the halo's SW flank, which is sharply defined. This SW flank marks the edge of a dark band that cuts across the galaxy's equatorial regions. Viewing this dark band generally requires a 16-inch class scope, though it's been reported in scopes as small as 10-inches.

NGC 3185 is a nearly face-on barred spiral, while NGC 3193 is an elliptical which appears about the same brightness as NGC 3190. In deep images, faint spiral member NGC 3187 shows two severely distorted spiral arms, yanked almost vertically above and below its plane. Distortion is also visible in the dark band and outer regions of dominant galaxy NGC 3190. Up there as down here, apparently, life in a tight family can sometimes involve a bit of stress.

### **NGC 3166 rating HARD**

#### **brightest of group in Sextans**

**RA 10h 13.8m Dec +03d 26.1' (2000)**

**Magnitude 10.6**

NGC 3166 is the brightest of a small group of galaxies located in northern Sextans about 9 degrees south of Regulus (Alpha Leo). This group includes most notably an interacting companion, NGC 3169, 8' ENE. NGC 3166 and NGC 3169 are both spirals. They form an approximately equal size, equal brightness pair and can fit in the same field of a high-power eyepiece. The size of each is roughly 5x3', and they are probably best viewed with a 10-inch or larger scope.

NGC 3166 is the brighter of the pair, elongated indefinitely E-W. It has a 20" core containing a substellar nucleus. NGC 3169 is slightly fainter, with an oval core and a slightly smaller and less stellar nucleus. In 1984, NGC 3169 hosted supernova 1984E, whose spectrum was notable for a huge H-alpha spike. The total energy emitted in the H-alpha line alone was over a million times that emitted by the Sun at all wavelengths. No such thing had ever been seen before in a supernova spectrum.

6' southwest of NGC 3166, in the direction opposite to NGC 3169, is a much smaller and fainter group member, NGC 3165. It's a difficult object in a 10-inch, but clearly visible at medium power. It appears as a diffuse patch elongated north-south with broad central brightening. One other group member, 13th-magnitude elliptical galaxy NGC 3156, lies 4 times farther away from NGC 3166, 24' out in the same SW direction. Look for a 40x20" spot in your 10-inch or a 1' glow in a 12-inch.



# SPRINGTIME PLANET PARTY

By DAVID PROSPER

March brings longer days for Northern Hemisphere observers, especially by the time of the equinox. Early risers are treated to the majority of the bright planets dancing in the morning skies, with the Moon passing between them at the beginning and end of the month.

The vernal equinox occurs on March 20, marking the official beginning of spring for the Northern Hemisphere. Our Sun shines equally on the Northern and Southern Hemispheres during the moment of equinox, which is why the March and September equinoxes are the only times of the year when the Earth's north and south poles are simultaneously lit by sunlight. Exacting astronomers will note that the length of day and night on the equinox are not precisely equal; the date when they are closest to equal depends on your latitude, and may occur a few days earlier or later than the equinox itself. One complicating factor is that the Sun isn't a point light source, but a disc. Its edge is refracted by our atmosphere as it rises and sets, which adds several minutes of light to every day. The Sun doesn't neatly wink on and off at sunrise and sunset like a light bulb, and so there isn't a perfect split of day and night on the equinox - but it's very close!

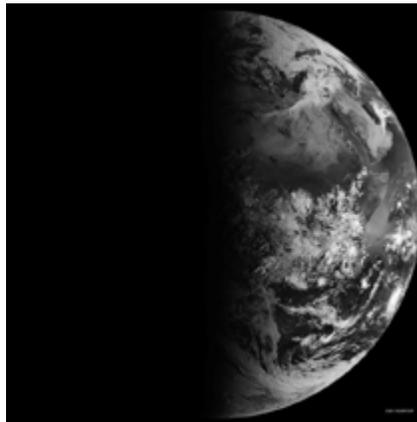
Ruddy Mars still shines in the west after sunset. Mars scoots across the early evening skies from Aries towards Taurus and meets the sparkling Pleiades star cluster by



Caption: The morning planets on March 31. Image created with assistance from Stellarium

month's end.

March opens with the morning planets of Jupiter, Saturn, and Venus spread out over the southeastern horizon before sunrise. A crescent Moon comes very close to Saturn on



Caption: Earth from orbit on the March equinox, as viewed by EUMETSAT. Notice how the terminator - the line between day and night - touches both the north and south poles. Additional information can be found at <http://bit.ly/earthequinox> Image credit: NASA/Robert Simmon

the 1st and occults the ringed planet during the daytime. Lucky observers may be able to spot Mercury by the end of the month. March 31 opens with a beautiful set of planets and a crescent Moon strung diagonally across the early morning sky. Start with bright Jupiter, almost due south shortly before dawn. Then slide down and east towards Saturn, prominent but not nearly as bright as Jupiter. Continue east to the Moon, and then towards the beacon that is Venus, its gleam piercing through the early morning light. End with a challenge: can you find elusive Mercury above the eastern horizon? Binoculars may be needed to spot the closest planet to the Sun as it will be low and obscured by dawn's encroaching glow. What a way to close out March!

Discover all of NASA's current and future missions at [nasa.gov](http://nasa.gov)

**This article is distributed by NASA Night Sky Network.**

The Night Sky Network program supports astronomy clubs across the USA dedicated to astronomy outreach.

Visit [nightsky.jpl.nasa.org](http://nightsky.jpl.nasa.org) to find local clubs, events, and more!

# IMAGE OF THE MONTH

//////////////////////////////////// Match 2019

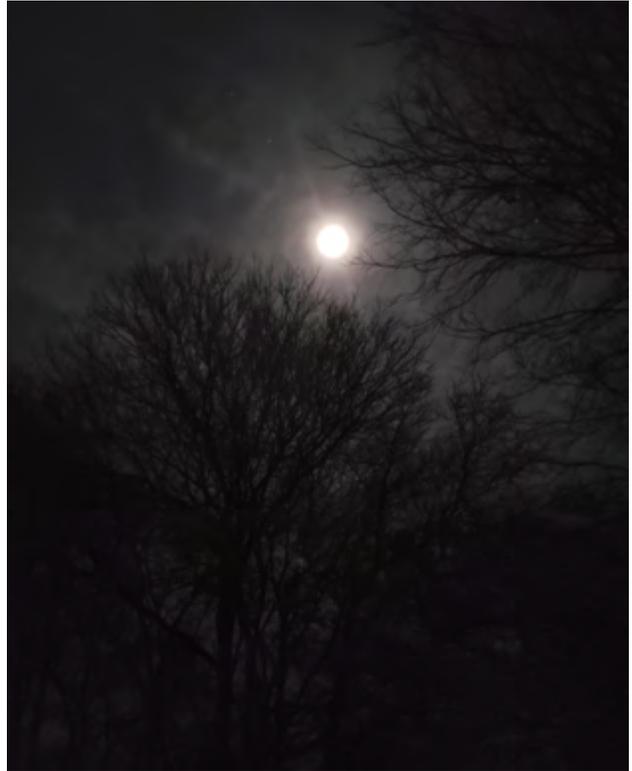
Congratulations to  
**STEPHEN HILL , IC1805, THE HEART NEBULA**



*IC1805, the Heart Nebula  
300mm lens and a DSLR,  
Star Adventurer camera tracker, and a Raspberry Pi v2 camera based autoguider.  
Stack of 44 images at 80 seconds, f4, ISO 1600, with darks, flats, and bias frames.  
Taken in the Hill Country.*

# MEMBERS' GALLERY

→  
**by Jessica Cofrancesco**  
*The Moon Right Before the January  
2019 Eclipse Began*



→  
**by Nathan Morgan**  
**Pelican Nebula**

This is my Starless  
Pelican Nebula taken  
in SHO with over 45  
Hours of total image  
integration time.



# MY 50 YEAR CHECK UP ON BAMBERGA

By Tom Richter

I started working on the Astronomical League Asteroid Observation Program and so recently started looking up positions of conveniently placed bright asteroids. One of those at opposition lately is 324 Bamberga. Coincidentally, I was flipping through an old issue of Sky and Telescope I had kept for many years, and a sketch of Bamberga that I had made in



1969 fell out! So my recent observation could be called a 50 year check up on Bamberga. It turns out that the 1969 opposition which I had recorded was a very favorable near-perihelion opposition which repeats on a 22 year cycle; this year's opposition was not really special, but I did confirm that Bamberga is still up there. The 1969 observation was made with my 4 inch Criterion "Dyascope", long gone now.



Caption: My observation records from both apparitions - (Click on picture to enlarge)



Caption: Page from Sky and Telescope describing the 1969 appearance - (Click on picture to enlarge)



# OUTREACH REPORT, MARCH 2019

By Joyce Lynch, Outreach Chair

Outreach Report  
Joyce Lynch, Outreach Chair

My husband Jim and I went to Hot Science, Cool Talks at UT on February 15. We did a “Your Place in the Universe” craft activity to go along with the talk by Caitlin Casey, Investigating Our Cosmic Origins.

On February 23 AAS participated in Girl Day at UT, hosted by the Women in Engineering Program. Jim Lynch and Gordon Schaefering showed the sun to hundreds of visitors. Dana Leary, Dianne Szabo and I talked with people about AAS and the Texas Night Sky Festival. Jennifer Escobar took the photos accompanying this article.



Coming up in March, we have our public star party at Inks Lake on the 23rd. A week later on the 30th, we’ll be at the Texas Night Sky Festival in Dripping Springs, where we’ll do solar viewing, talk with visitors at an information and craft table, and participate in an evening star party. Look for emails with information about how you can help throughout the month.



# NIGHT SKY FESTIVAL



AAS is now a partner of the Texas Night Sky Festival® (TNSF)! This free to attend, family oriented, biannual Festival is a not-to-miss event. This year's Festival is scheduled for March 30, 2019.

The last TNSF had over 2800 attendees and more are expected this year. As before, the Festival will be held at Dripping Springs Ranch Park and Event Center on RR 12 north of Highway 290. AAS will staff a double-sized exhibitor table during the Saturday event, and will host solar and night-sky star parties.



The Saturday Festival will feature guest speakers, numerous night sky related exhibitors, great food trucks, live music, solar observing and an evening star party. Kids of all ages can earn the Dark Sky or Midnight Defender patches. Speakers will include Irene

**“This year’s Festival is scheduled for March 30, 2019.”**

Pease from the New York Hayden Planetarium and Bill Wren from McDonald Observatory. Terri Hendrix and Lloyd Maines will headline the live music stage.

A public star party will follow the daylight portion of the Festival. The public part of the star party officially ends at 11:00 p.m., but all astronomers are invited to stay and observe all night. The observing site is a short distance north of the exhibit building but is well shielded by trees. Tent camping will be available near the observing field and a limited number of RV sites with hookups are available to reserve near the main festival building. Moonrise

will not occur until around 3:00 a.m., so there will be lots of deep sky targets to observe.

On Sunday, March 31, the Festival, in conjunction with the International Dark-Sky Association (IDA), will host a workshop on dark sky advocacy, with a focus on how to apply to be recognized by IDA as an International Dark Sky Place. Anyone with a passion for dark skies should attend. There will be a small charge to cover lunch at the Sunday event.

As a TNSF Partner, AAS will be listed above Sponsors in TNSF publications where Partners, Sponsors, and/or Exhibitors are all listed, and the AAS logo and name is already included in Festival advertising.

All AAS members are encouraged to come and share their love of the sky!

Stay abreast of details about the event by visiting [www.TexasNightSkyFestival.org](http://www.TexasNightSkyFestival.org).





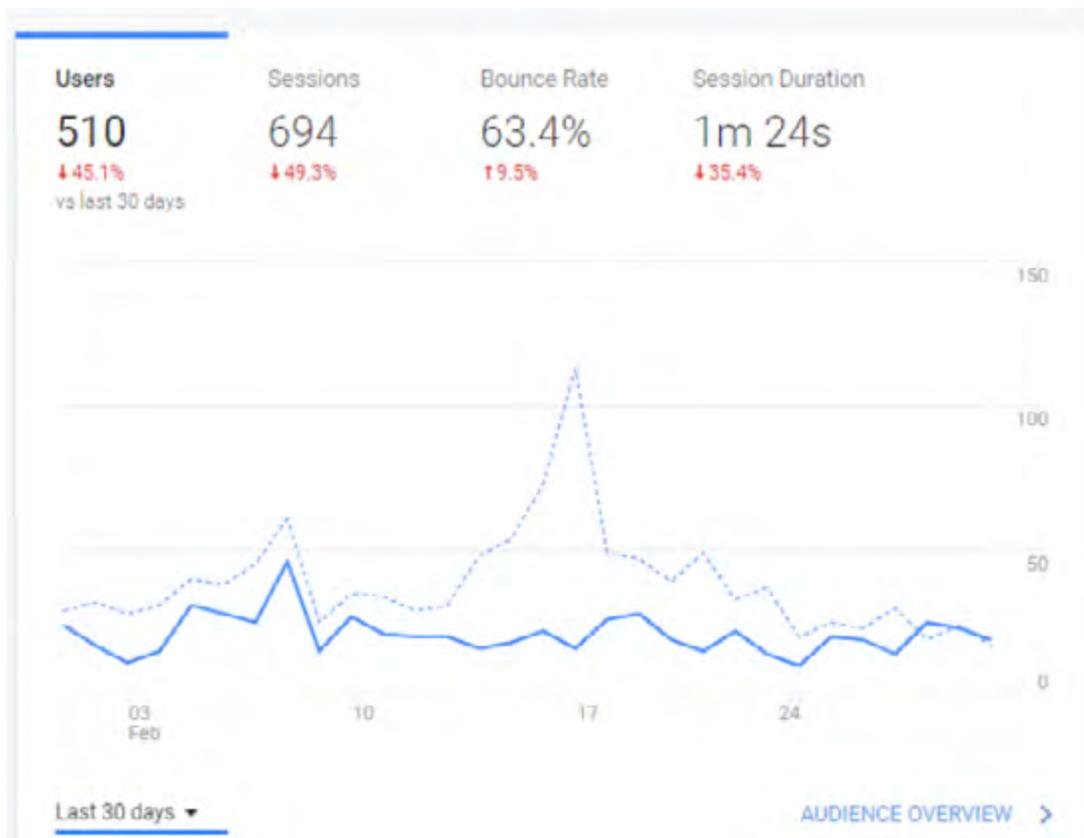
# COMMUNICATIONS REPORT, MARCH 2019

By Sean Leary, Communications Chair

Communications Chair: Sean Leary  
For the Executive Committee meeting in March 2019

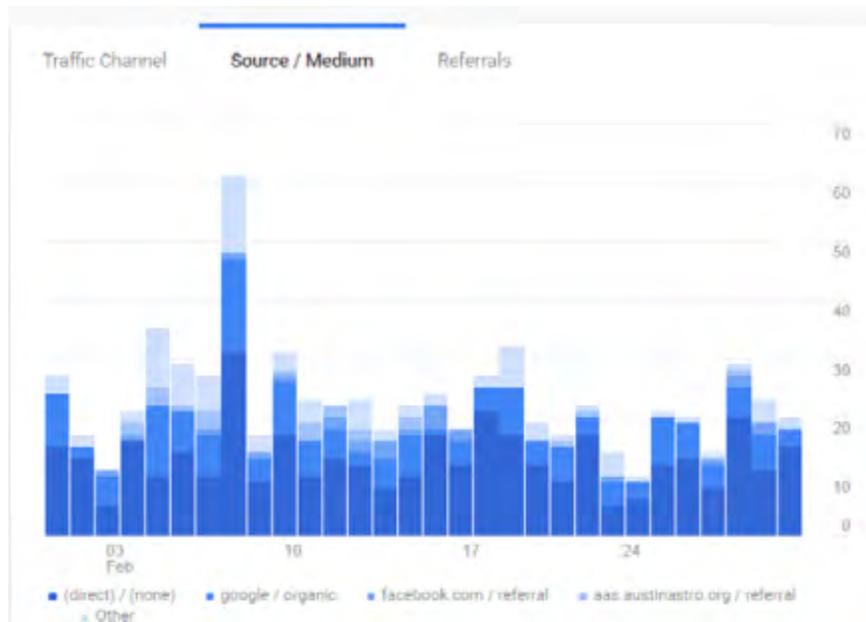
- Updated Mar, May star parties with 'Star Party' category, and added date to Mar link for easier access.
- Inks lake Mar 23 star party: Post, FB event
- Sidereal Times Feb: page update, banner and link
- Image of the month Feb: banner and link
- Mar 8 GA: FB event
- Re-organized the communications handbook into logical sections, removed redundant content

## Website traffic for the past month



# COMMUNICATIONS REPORT CONTINUED

How many people are visiting the site?



Who is sending us traffic?

Page	Pageviews	Page Va
/	733	\$0
/index.php/events/	46	\$0
/index.php/membership/	26	\$0
/index.php/about-aas-2/	20	\$0
/index.php/about-aas/	19	\$0
/index.php/event/aas-...iday-february-8-2019/	19	\$0
/index.php/monthly-meeting/	19	\$0
/index.php/events/aas-...eason-of-the-people/	19	\$0



# TREASURER'S REPORT, FEBRUARY 2019

By Dana Leary, Treasurer

## February 2019 Treasurer's Report

### Deposits:

Dues payments		
Checks	\$ 0.00	
Paypal	\$ 0.00	
Dues payments in checking acct.		\$ 0.00
Interest earned - reg. (donations)		int. reported quarterly
interest earned - scholarship		int. reported quarterly
Interest earned-checking	\$ 0.90	
Interest earned - CD - A	\$ 4.92	
Interest earned - CD - B	\$ 5.79	
Total interest earned		\$ 11.61

**Deposit Totals for Feb 2019: \$ 11.61**

### Expenses:

Life Storage - telescope storage	\$ 65.00
Check #2195 - voided	\$ 0.00
Check #2196 - pd to Dawn Davies for business cards,	\$ 56.51
Check #2197 - pd to Terry Phillips for Feb speaker's hotel exp.	\$ 114.99

**Expenses for Feb 2019: \$ 236.50**

### Bank Balances:

UFCU donations - 3.61 2/6/19	\$ 2,049.60
UFCU scholarship special **	\$ 1,001.91
UFCU checking -- checks 2192, 2194 cleared in Feb	\$ 22,756.29
UFCU CD - A	\$ 5,860.57
UFCU CD - B	\$ 5,840.20
Paypal account	\$ 176.10
<b>Total cash as of 2/28/2019:</b>	<b>\$37,684.67</b>

AAS members        449  
AAS memberships    330



# EXECUTIVE GENERAL ASSEMBLY MINUTES, JAN. 2019

By John Cassidy, Secretary

Minutes of the January 11, 2019 General Assembly meeting

President Tim Brown called the meeting to order at 7:35pm at St Stephens. A quorum was present.

Tim asked visitors and new members to introduce themselves.

Officers gave their reports.

Brian Lippincott presented Space News.

Jim Spigelmire presented on relative sizes of celestial object.

Frank Mikan had hoped to give us some telescope time but the rain prevented it.

The meeting was adjourned at 8:15.



## **ASTRONOMY FOR PAY**

Recently we have received several requests for star parties from commercial entities. Since we focus on non-profits such as schools and libraries, we offered these groups the option of paying astronomers to conduct the event. There could be similar requests in the future, so we are compiling a list of members who might be interested in participating. If you would like to have your name on the list of people interested in doing events for pay, please send an email to [outreach@austinastro.org](mailto:outreach@austinastro.org) Include your name, contact information, where in Central Texas you are willing to go, any specific areas of astronomy that interest you, and a little bit about your experience with observing.



# EXECUTIVE COMMITTEE MINUTES, JAN. 2019

By John Cassidy, Secretary

January 7, 2019

The meeting was call to order by Tim Brown at 7:00 PM at the Brown residence.

Present were:

Tim Brown  
Kathy Brown  
Terry Phillips  
Nathan Morgan  
John Cassidy  
Dana Leary  
Joyce Lynch  
Brian Lippincott  
Jim Spigelmire  
Dawn Davies  
Domingo Rochin  
Jessica Cofrancesco  
Vanessa Perez

## **Main topics on the Agenda handout were:**

January Meeting.  
Changes to Bylaws.  
Officer and Member at Large Reports.

## **Officer and Member at Large Reports**

**President.** Tim

1. The January GA meeting will be at St. Stephens to participate in 100 Hours of Astronomy. Frank will operate the St Stephen's scopes for us.

**Vice-President.** Terry

1. The Committee discussed the Austin Gem and Mineral Society building and the ACC facilities on Rio Grande or Highland Mall as meeting venues. Inquiries will be made but no action was taken.
2. The Committee discussed speakers for the 50th anniversary of the Society.

**Treasurer.** Dana

## EXECUTIVE COMMITTEE MINUTES, CONTINUED

1. Dana reported a \$500 was received on January 31.
2. The Committee discussed how long inactive individuals should be shown as members on the Society rolls. The Committee decided that those inactive for 180 days or more should be purged from the rolls and those inactive since September should be sent notices.

### **Outreach.** Joyce

1. The Society will participate in Girls Day at UT in February.
2. The Committee discussed a request by the Austin Zoo for participation in a light pollution event. No action was taken.
3. Joyce discussed the proposed bylaw amendments. A motion was made to amend the by-laws to eliminate absentee ballots. The motion was seconded and passed.

### **Equipment.** Brian & Dawn

1. The Committee accepted the donation to the Society of a 24-inch reflector.
2. No new activity regarding the state park sites.
3. Domingo reported on a possible observing site near Lampasas. The Committee requested he look into the particulars of the site

### **Member Services.** Vanessa

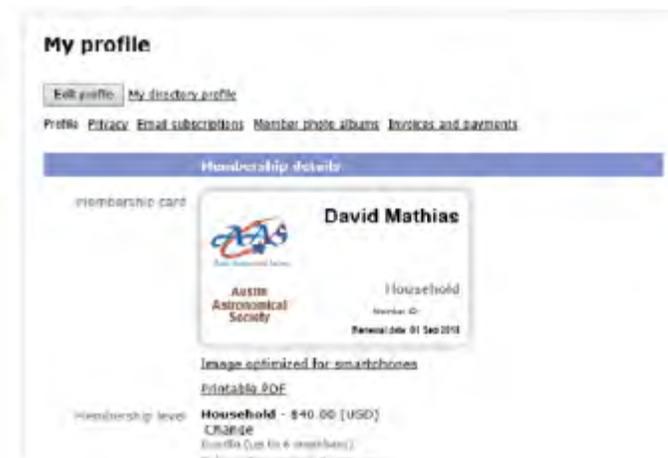
1. There are several scheduled star parties over the next few months.
2. There will also be a lunar eclipse party at Mansfield Dam for the February eclipse.
3. Practical Astronomy will deal with telescope repairs.

Meeting was adjourned at 8:40 PM

John Cassidy, Secretary

# MEMBERSHIP CARDS NOW IN YOUR PROFILES

At last, Wild Apricot, our membership database vendor, has made available to its customers membership card templates. Now, under your AAS membership profile you will see a mockup of a card with your name, Membership ID and membership expiration date. You are offered two options for displaying your card: one which is suitable for displaying from a smartphone, and another printable PDF which you can cut and laminate to your heart's delight.



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## NIGHT SKY NETWORK

The Night Sky Network is a nationwide coalition of amateur astronomy clubs bringing the science, technology, and inspiration of NASA's missions to the general public. AAS members can register with NSN and receive the NSN newsletter and email about upcoming webinars and any additional information or announcements created by the NSN for members. They will be able to search for resources, view all of the toolkits and the files, and access the downloads in each kit.

If you are interested in registering, here is the procedure.

Go to <https://nightsky.jpl.nasa.gov/index.cfm>

Enter your zip code in the upper right box for CURRENT LOCATION.

Scroll down to CLUBS NEAR YOU and click on AAS.

Click on Register in the toolbar on our page.

Fill out the form and submit.

Your form will be sent to the club for approval.

If you have any questions, email [outreach@austinastro.org](mailto:outreach@austinastro.org)

# JOINING AAS OR RENEWING MEMBERSHIP

To join or renew your membership to AAS, please visit: <http://austinastro.org/index.php/why-should-you-be-a-member/> There are six membership levels to choose from:

**Household Bundle (up to 6 members) \$40.00 (USD)**

Renewal: Every one year, starting from join date

No recurring payments. For members of a household living at the same address.

**Household With Senior (up to 6 members) \$28.00 (USD)**

Renewal: Every one year, starting from join date

No recurring payments.

For members of a household living at the same address and at least one member is over 65 years of age.

**Junior \$15.00 (USD)**

Renewal: Every one year, starting from join date

No recurring payments. For members up to age 18.

**Students \$15.00 (USD)**

Renewal: Every one year, starting from join date

No recurring payments. For members age 18 and older.

**Regular \$25.00 (USD)**

Renewal: Every one year, starting from join date

No recurring payments. For individual members.

**Seniors \$15.00 (USD)**

Renewal: Every one year, starting from join date

No recurring payments. For members 65 years of age or older.



# OFFICERS OF THE SOCIETY, 2018-2019

President	Tim Brown	<a href="mailto:president@austinastro.org">president@austinastro.org</a>
Vice-President	Terry Phillips	<a href="mailto:vicepresident@austinastro.org">vicepresident@austinastro.org</a>
Secretary	John Cassidy	<a href="mailto:secretary@austinastro.org">secretary@austinastro.org</a>
Treasurer	Dana Leary	<a href="mailto:treasurer@austinastro.org">treasurer@austinastro.org</a>
Communications Chair	Sean Leary	<a href="mailto:communications@austinastro.org">communications@austinastro.org</a>
Outreach Chair	Joyce Lynch	<a href="mailto:outreach@austinastro.org">outreach@austinastro.org</a>
Equipment Chair	Brian Lippincott	<a href="mailto:equipment@austinastro.org">equipment@austinastro.org</a>
Member Services Chair	Vanessa Perez	<a href="mailto:memberservices@austinastro.org">memberservices@austinastro.org</a>
Member-at-Large	Pamela Castillo	<a href="mailto:membersatlarge@austinastro.org">membersatlarge@austinastro.org</a>
Member-at-Large	Greg Rohde	<a href="mailto:membersatlarge@austinastro.org">membersatlarge@austinastro.org</a>
Member-at-Large	Jessica Cofrancesco	<a href="mailto:membersatlarge@austinastro.org">membersatlarge@austinastro.org</a>
Member-at-Large	Frank Mikan	<a href="mailto:membersatlarge@austinastro.org">membersatlarge@austinastro.org</a>
Member-at-Large	Domingo Rochin	<a href="mailto:membersatlarge@austinastro.org">membersatlarge@austinastro.org</a>
Member-at-Large	Jim Spigelmire	<a href="mailto:membersatlarge@austinastro.org">membersatlarge@austinastro.org</a>
Parliamentarian*	Ron Carman	<a href="mailto:parliamentarian@austinastro.org">parliamentarian@austinastro.org</a>
ALCor (Astronomical League)*	Tara Krzywonski	
IDA Rep (Dark Skies)*	John Cassidy	<a href="mailto:darks skies@austinastro.org">darks skies@austinastro.org</a>
Newsletter Editor*	Nathan Morgan	<a href="mailto:newsletter@austinastro.org">newsletter@austinastro.org</a>
Webmaster*	Maurice Nelson	<a href="mailto:webmaster@austinastro.org">webmaster@austinastro.org</a>
* designates appointed position		

Visit Dawn Davies' *Earthbound Astronomer* website at <https://www.earthboundastronomer.com/>

Amy Jackson's website is <http://www.starryskyaustin.com/>. Learn more about her children's book about astronomy at <http://www.starryskyaustin.com/childrens-book-project/>

Rob Pettengill's site can be found at <http://astronomy.robpettengill.org/>. Rob's material shared per CC BY-NC-SA 4.0 license.

Celestial Teapot's product catalog can be found at <http://messierplanisphere.com/>

Joseph Macry writes a weekly column for Manor Community News: "This Week in Astronomy". You can read the online edition here: <http://manorcommunitynews.com/>