

# PAS-Times



The newsletter of the Pontchartrain Astronomy Society  
*visit us online [www.astronola.org](http://www.astronola.org)*

September 2020  
Volume 61, Issue 9



**Next PAS General Meeting**  
**Friday, September 4th - 7:30pm**  
**Zoom meeting due to COVID-19**

**MAGIC NEOWISE by Urs Leutenegger**  
**Roque de los Muchachos Observatory**  
**on the Canary Island of La Palma**

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**President's Message**

By: **Bill Johnson**

Greetings, and welcome to September, with promises of cooler weather and opportunities for longer nights soon to come. We roll into Fall, and start to think about being able to begin nighttime observing just a little bit earlier, as the days get shorter. While not here yet, cooler weather is just over the horizon. We start to think about what we can spend time observing, without having to fight the bugs or the sweat that we've been putting up with for the last 4-5 months. I've had several sessions out under the stars recently. While the Summer sky offers a lot to choose from, the south Louisiana heat is a constant complaint.

Jupiter and Saturn are back in the evening sky. Saturn is chasing and gaining on Jupiter. While it is a few months out, I hope you mark your calendar for Dec 21st. Not only is this the first day of winter, but it is also the night Jupiter and Saturn are in conjunction with each other. They will pass so close together that both will be able to be viewed at the same time in a telescope. This will be the "tightest" conjunction since 1623. Spend some time now on Jupiter and Saturn so you will be able to appreciate viewing both at the same time. Should be a perfect Photo Op for our viewing enjoyment.

If you're up early, Venus is dominating the morning sky at Mag -4.3, and in

the constellation Gemini. Mars is also putting on a show, brightening to -1.6 and outshining Spica.

Our next meeting will be on Friday, September 4th at 7:30PM. We have done several meetings on Zoom, and it looks like this will continue until we get Covid under control. We have seen some downward momentum of this extremely frustrating pandemic, and we need everyone to continue to stay safe, follow guidelines, and help to slow this thing down. Only then will we be able to get back to our usual activities of doing what we do best- observing the night sky together. Mark your calendar and make plans to attend our Virtual September meeting. I hope to see everyone there.

Sometimes when I'm out gazing up at all the wondrous things in our night sky, and Covid is light years away from my thoughts, all is well again in the world for just those few short hours. I hope you are able to get out and do some observing. Let us know what you see!

Bill Johnson PAS president 2018-2020



PAS member Norman Jacobs snaps a moon and Jupiter image one night.

## Secretary's Report August 2020 General Meeting By: Jeff Best

August 7, 2020 Meeting Notes - Jeff Best

14-members were in attendance for our 4th virtual meeting

Bill Johnson opened the meeting at 7:30 pm, welcomed everyone & suggested we skip officer's reports.

- Held an open discussion on the following topics:
  - NEOWISE comet viewing
  - Sun activity & viewing, Jack Huerkamp shared a couple of photos he recently took
  - Upcoming meteor shower which will peak on August 12th
  
- Discussion on future meeting location as Covid restrictions relax:
  - UNO not likely to allow non-school related activities after reopening.
  - Kenner Planetarium appears to be our best option at present.
  - No cost to the club & has enough space to accommodate typical size of our meetings.
  - Some members discussed their involvement in past operations at the planetarium.
  - New Planetarium in New Orleans East was also mentioned but no details available at present.
  
- Need candidates for 2021 officers:
  - Bill Johnson plans to step aside after serving as president for the past 3-years.
  - Election will be held during November's meeting.
  - Please email Bill if you're interested in serving in any capacity.
  
- Bill Johnson presented a disussion on Eyepiece Basics
  
- Open discussion:
  - Need volunteers & topics for future meetings.
  - A member suggested future meetings include a summary of upcoming near-term astronomical events.
  - Several Halley's Commet pictures from the past were shared.
  
- Meeting adjourned at approximately 9:00 pm.
  
- Next Meeting – September 4th - Will again be virtual so look for an invitation coming soon.

# Summer Triangle Corner: Altair

By David Prosper

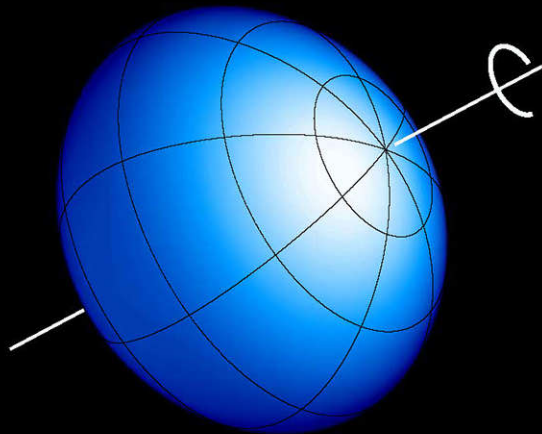
Altair is the final stop on our trip around the Summer Triangle! The last star in the asterism to rise for Northern Hemisphere observers before summer begins, brilliant Altair is high overhead at sunset at the end of the season in September. Altair might be the most unusual of the three stars of the Triangle, due to its great speed: this star spins so rapidly that it appears "squished."



A very bright star, Altair has its own notable place in the mythologies of cultures around the world. As discussed in our previous edition, Altair represents the cowherd Niulang in the ancient Chinese tale of the "Cowherd and the Weaver Girl." Altair is the brightest star in the constellation of Aquila the Eagle; while described as part of an eagle by ancient peoples around the Mediterranean, it was also seen as part of an eagle by the Koori people in Australia! They saw the star itself as representing a wedge-tailed eagle, and two nearby stars as his wives, a pair of black swans. More recently one of the first home computers was named after the star: the Altair 8800.

Altair's rapid spinning was first detected in the 1960s. The close observations that followed tested the limits of technology available to astronomers, eventually resulting in direct images of the star's shape and surface by using a technique called interferometry, which combines the light from two or more instruments to produce a single image. Predictions about how the surface of a rapidly spinning massive star would appear held true to the observations; models predicted a squashed, almost "pumpkin-like" shape instead of a round sphere, along with a dimming effect along the widened equator, and the observations confirmed this! This equatorial dimming is due to a phenomenon called gravity darkening. Altair is wider at the equator than it is at the poles due to centrifugal force, resulting in the star's mass bulging outwards at the equator. This results in the denser poles of the star being hotter and brighter, and

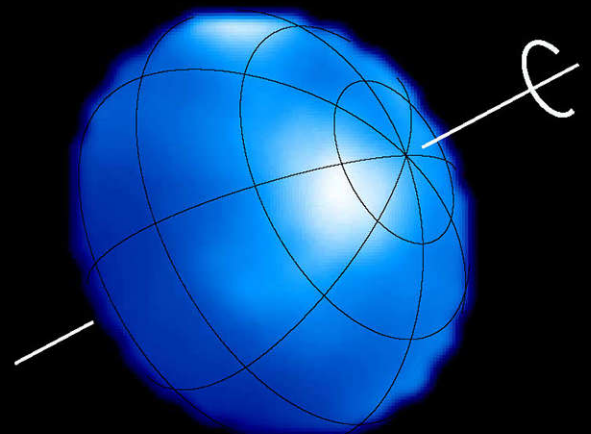
Model of a fast-spinning star



Equator bulges and darkens as star spins faster

2.8 revolutions/day

Actual image of Altair from the CHARA Interferometer



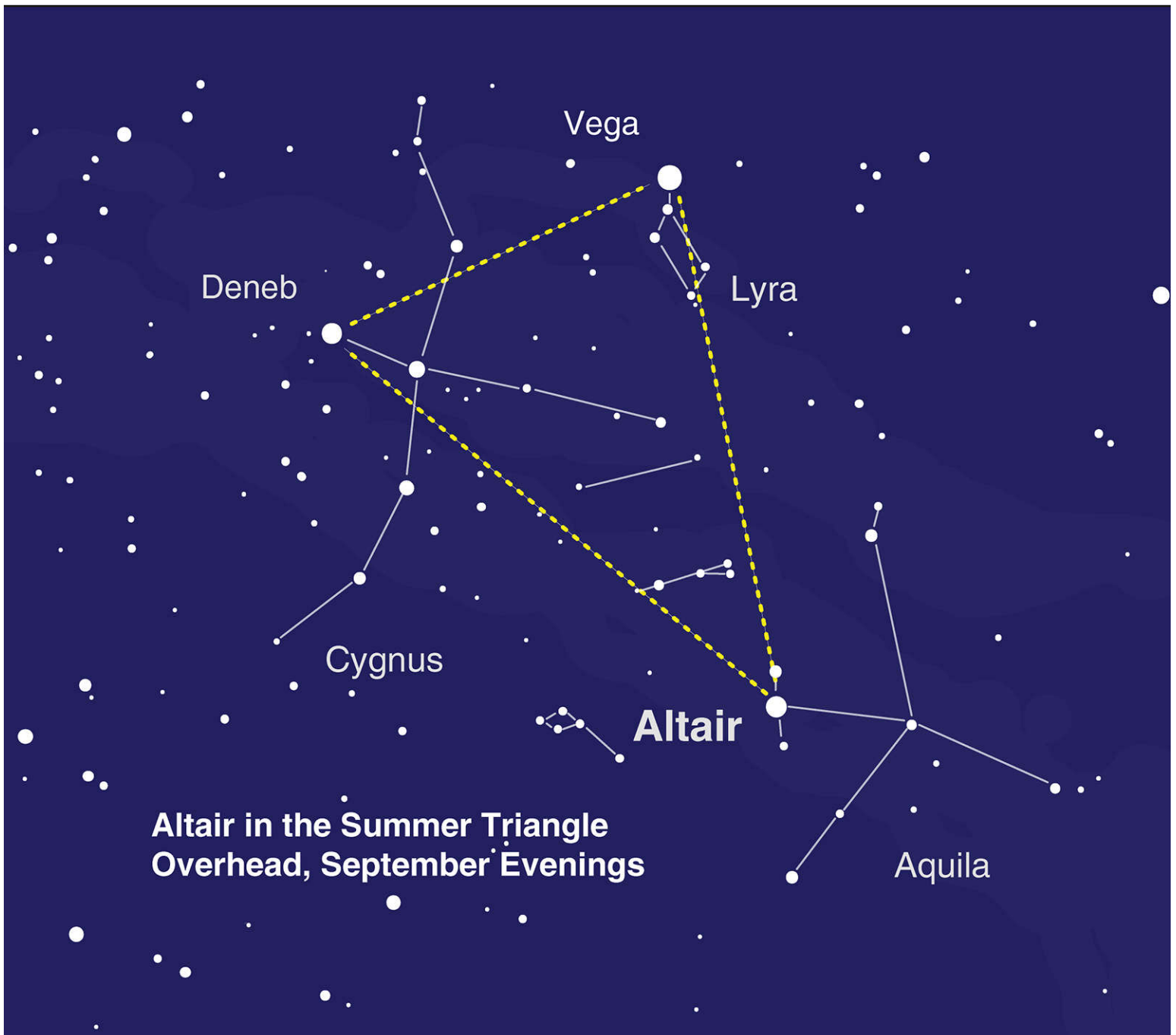
*The image on the right was created using optical interferometry: the light from four telescopes was combined to produce this image of Altair's surface. Image credit: Ming Zhao. More info: [bit.ly/altairvsmodel](http://bit.ly/altairvsmodel)*

*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.gov](http://nightsky.jpl.nasa.gov) to find local clubs, events, and more!*

the less dense equator being cooler and therefore dimmer. This doesn't mean that the equator of Altair or other rapidly spinning stars are actually dark, but rather that the equator is dark in comparison to the poles; this is similar in a sense to sunspots. If you were to observe a sunspot on its own, it would appear blindingly bright, but it is cooler than the surrounding plasma in the Sun and so appears dark in contrast.

As summer winds down, you can still take a Trip Around the Summer Triangle with this activity from the Night Sky Network. Mark some of the sights in and around the Summer Triangle at: [bit.ly/TriangleTrip](http://bit.ly/TriangleTrip). You can discover more about NASA's observations of Altair and other fast and furious stars at [nasa.gov](http://nasa.gov).

## *NASA Night Sky Notes!*



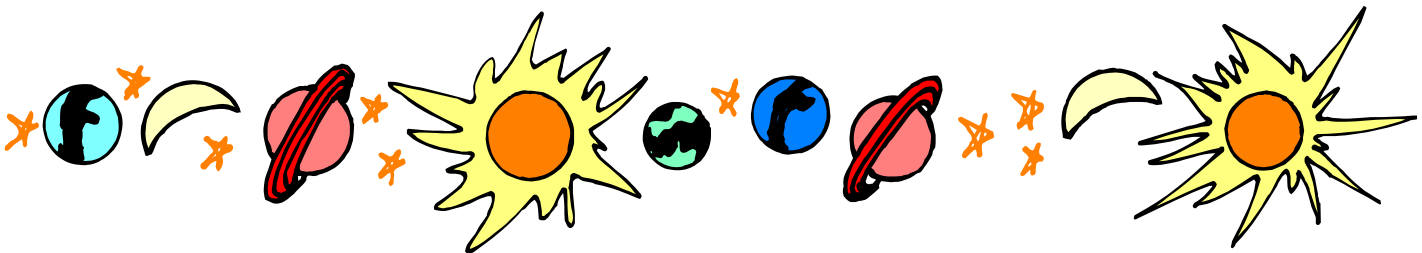
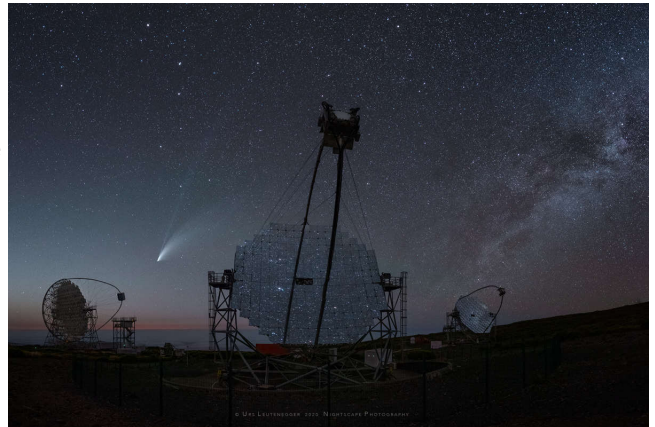
*Altair is up high in the early evening in September. Note Altair's two bright "companions" on either side of the star. Can you imagine them as a formation of an eagle and two swans, like the Koori?*

## On the front cover is MAGIC NEOWISE

Image Credit: Urs Leutenegger

Explanation: The multi-mirror, 17 meter-diameter MAGIC telescopes reflect this starry night sky from the Roque de los Muchachos European Northern Observatory on the Canary Island of La Palma. MAGIC stands for Major Atmospheric Gamma Imaging Cherenkov and the telescopes can see the brief flashes of optical light produced in particle air showers as high-energy gamma rays impact the Earth's upper atmosphere. On July 20, two of the three telescopes in view were looking for gamma rays from the center of our Milky Way galaxy.

In reflection they show the bright stars of Sagittarius and Scorpius near the galactic center to the southeast. Beyond the segmented-mirror arrays, above the northwest horizon and below the Big Dipper is Comet NEOWISE. NEOWISE stands for Near Earth Object Wide-field Infrared Survey Explorer. That's the Earth-orbiting satellite used to discover the comet designated C/2020 F3, but you knew that.



We are now just about 2 months out from the start of the **38th Annual Deep South Star Gaze**. If we can hold the Deep South Star Gaze doing so will make us the oldest annually held star party (without a break) in the United States. That will be an achievement that we can all be proud of. There are other astronomical events that are older - Stellafane, the Texas Star Party and the Riverside Telescope Makers Convention; however Riverside held their last event in 2019 and then folded, and both Stellafane and the Texas Star Party cancelled. Stellafane had cancelled before during World War II and the Texas Star Party began 1 year before the DSSG. So, once again, if we do a DSSG this year we will have the longest streak going. (Other events like Okie-Tex, the Nebraska Star Party, Peach State, El Dorado, the Mid-South and a host of others all began after our first DSSG in 1983.) We were contemplating cancelling in 2005 after Hurricane Katrina, but we went ahead on a shortened schedule and it was one of our best with beautiful weather.

Certainly I cannot guarantee that we will hold the DSSG this November, but as of right now we will. Our host, Carol Nicaud at White Horse is more than willing to have us come and she will be making every effort to keep us safe. I would however be deceiving all of you if I said that there is nothing to worry about/nothing in front of us to make us take extra precautions. We will need to do that because of COVID 19. The subject has been beaten to death so all I will do here is to post a link to what is on the El Dorado Star Party website. Requirements there that have been put in place because of COVID 19. As we move closer to our start date of November 10th, we will tweak our recommendations but I am sure that our recommendations to help keep all of us safe will look much like the El Dorado Star Party recommendations/requirements. [eldoradostarparty.org/coronavirus-and-esp/](http://eldoradostarparty.org/coronavirus-and-esp/)

Something else we will not have this year given the current state of affairs is a registration fee like in past years. It will be greatly reduced. It will basically be a place holder to hold your reservation. We will likely cap the headcount when we approach the maximum number that I believe we can safely handle, likely no more than 30 that need bunks. (We can handle more - those staying in tents, campers, rv's and those staying off-site or just coming up for the day and early evening. Hope to see some of you between November 10th and November 15th.

Barry Simon - Deep South Star Gaze 2020

## Upcoming Events

**PAS General Meeting** Friday, September 4th. Virtual online due to COVID-19

**Deep South Stargaze** November 10th-15th, 2020 - Camp Whitehorse

Visit the PAS website and forum for COVID-19 info, virtual meeting information and outreach updates....

# www.astronola.org

### On the Cover

MAGIC NEOWISE

Image Credit: Urs Leutenegger

### On the Back Cover

Constellation Gemini

from Urania's Mirror - A View of the Heaven

The PAS is a proud member of these organizations:

International Dark-Sky Association



Member



## PAS 2020

General Meetings

**ZOOM**

September 4

October 2

Picnic TBA

November 6

December 4

**Holiday Party**

### October 2020 PAS-Times Deadline

Sunday, September 20th  
Please submit all things astronomical to be included in the next edition of PAS-Times to the editor at the following address:  
**pas2vp@astronola.org**

### 2020 Membership Renewal Form

Date \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

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Home Phone\* \_\_\_\_\_

Work Phone\* \_\_\_\_\_

Occupation \_\_\_\_\_

E-mail Address \_\_\_\_\_

\*Check here  if you DO NOT want your phone numbers published.

### Membership Dues:

(Calendar year per household) \$40.00 \_\_\_\_\_

(Calendar year per Student) \$20.00 \_\_\_\_\_

### Optional Subscriptions:

Sky & Telescope \$32.95/yr \$65.95 two years

\_\_\_\_ New \_\_\_\_ Renewal \_\_\_\_\_

Astronomy \$34.00/yr or \$60.00/2years

\_\_\_\_ New \_\_\_\_ Renewal \_\_\_\_\_

Mailed Newsletter \$20.00/yr \_\_\_\_\_

SPMOS Key Deposit \$25 \_\_\_\_\_

Only pay this if you do not have a Dorm key and want to obtain one.

Optional Donation: \_\_\_\_\_ (Tax Deductible)

Total Amount: \_\_\_\_\_

(Make check payable to PAS)

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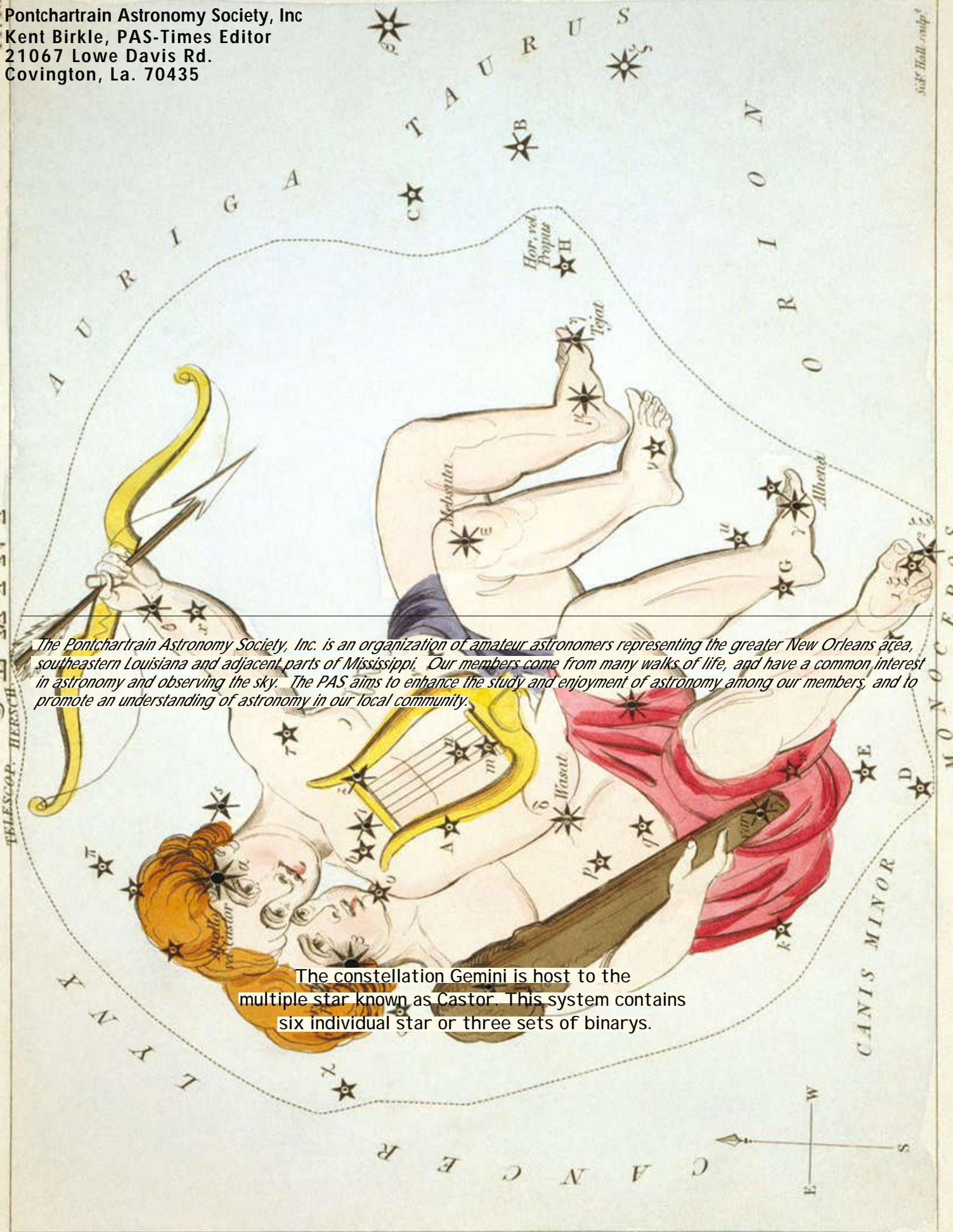
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Members can also renew their membership and pay dues on the website. Here is the link: <http://astronola.org/join.php>

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G E M I N I

TELESCOP. HEESCH



*The Pontchartrain Astronomy Society, Inc. is an organization of amateur astronomers representing the greater New Orleans area, southeastern Louisiana and adjacent parts of Mississippi. Our members come from many walks of life, and have a common interest in astronomy and observing the sky. The PAS aims to enhance the study and enjoyment of astronomy among our members, and to promote an understanding of astronomy in our local community.*

The constellation Gemini is host to the multiple star known as Castor. This system contains six individual star or three sets of binaries.