



FEBRUARY 2022

NIGHTFALL

A PUBLICATION OF THE HUACHUCA ASTRONOMY CLUB

FEB 2022 - NOTES FROM YOUR PRESIDENT

For those who are newbies to astronomy and/or telescopes, our club will be sponsoring a short intro course in March, sort of a "Cliff's Notes" on Telescopes and viewing. There will be a total of four classes; three of these will be in the classroom at Patterson on Saturday afternoons from 2pm-3pm March 12, 19, and 26. The fourth session will be at the April Public Night. The classes will be taught by Thomas Brondum.

The first class on March 12 will cover types of scopes and mounts. The second class on March 19 will discuss what there is to look at and how best to see it with what type of equipment. The third class will give participants a chance to bring their personal scope, or use a borrowed one, for a hands-on application of what to do, how to do it, and when. The fourth session will be on April 7th, ten days after the third class which explained and demonstrated how to set up and use an actual scope. This is intended to give the participant time to have practiced with the scope at home so if they have any questions, they can get additional help at public night.

Currently have 9 members enrolled. This is intended to be a small class so you can get individual attention. If you would be interested in attending, respond to Karen Madtes <ckmadtes3@yahoo.com>. Clear skies!!

WELCOME OUR NEW MEMBERS

Rowland Augustus of Beavercreek, Ohio joined at the January meeting. Rowland is a frequent visitor to our area and observes with a Meade LX 90. Joseph DePaul and Meleah Yancey of Sierra Vista joined as a family. And our newest members are Joann and Stuart Deakin of Sierra Vista. Joann is teaching astronomy at Cochise College. Welcome, we are glad you joined!

THE FEBRUARY MEETING

The February meeting of the Huachuca Astronomy Club will be held over **ZOOM** on **February 18, 2022** at 7pm. **Meeting**

ID 816 0546 7907. HAC members will get an email with a clickable link for joining the meeting.

Our speaker will be Dr. Pierre Haenecour. Assistant Professor U of A, LPL

Pierre's research interests focus on the building blocks and early history of the Solar System history, and the origin of life through the coordinated study of circumstellar and interstellar dust grains and organic molecules in unequilibrated planetary materials



(e.g., meteorites, micrometeorites and interplanetary dust particles).

Pierre's talk will be titled:

"We are stardust ... stardust in the laboratory"

The March 18 meeting will be back in-person in the community room in the Student Union Building.

2022 DUES REMINDER

If you have not paid your 2022 dues, there are a number of ways to do so:

1. You can pay your dues in person by cash or check made out to Huachuca Astronomy Club. See the treasurer, Ted Forte, at a meeting or event.
2. You can mail your dues check to the Huachuca Astronomy Club PO Box 922, Sierra Vista AZ 85636
3. You can pay online by visiting www.hacastronomy.org and pulling down the membership menu. You'll be directed to Pay Pal where you can use your Pay Pal account OR your credit card.

4. If you have a Pay Pal account, you can use PayPal Direct to send your payment to paypal@hacastronomy.org

5. If you have a Zelle account with your bank, you can make a dues payment by transferring funds to twforte@powerc.net

If you are uncertain of your membership status, you can contact the treasurer, Ted Forte. If you have decided not to renew your membership, please let us know so we can remove you from the roster.

Dues are \$35 family (\$25 active-duty military), \$25 individual (\$20 active-duty military) and \$10 for students with valid ID. Membership is for one year. Members are asked to pay a prorated amount on their first renewal to synchronize their membership to the calendar year.

SCHEDULE FOR 2022

Our meetings will be held in the community room, Student Union Building, Cochise College, 901 N Colombo Avenue, Sierra Vista Watch the group and the newsletter for updates and instructions.

You can access the calendar here:

<https://groups.io/g/HACAstro/calendar>

2022 Meeting dates:

- February 18
- March 18
- April 15
- May 6
- June 17
- July 1
- August 12
- September 9
- October 7
- November 4
- December 9

We will have at least two Kartchner Star Parties. These events consist of three parts: solar observation beginning at 12:00, a talk from a guest speaker at about 5:00 or 5:30, and then star gazing until 9:00

2022 Kartchner Star Party dates:

- April 2
- October 22

We will also be having several Patterson Public Nights this year, generally on the Thursday closest to first quarter moon. We advertise these events as starting a half hour after sunset but guests often arrive early. These public nights are scheduled near first quarter moon so that we have a daylight/twilight target to enjoy. Guests now must register in advance so we can limit attendance. HAC members and Foundation board members do not need to register.

Non-members register at

www.universitysouthfoundation.com/patterson-observatory

Admission is free. Public Nights are not scheduled for July or August.

The scheduled dates are as follows:

- February 3
- March 10
- April 7
- May 5
- June 9
- September 1
- September 29
- October 27
- December 1
- December 29

Member star parties may be held on the weekend of new moon subject to the availability of a host.

ASTRONOMY DAY

National Astronomy day is Saturday, May 7, 2022. To celebrate, HAC will engage in "Sidewalk Astronomy" at the Sierra Vista Library on Saturday, May 7, 2022. We will be there starting at 10 am and going until the library closes. Please make plans to attend.

The Astronomical League has a 76 page handbook of ideas and recommendations for planning and hosting Astronomy Day events. Go to

<https://skyandtelescope.org/wp-content/uploads/Astronomy-Day-Handbook-7th-edition.pdf> to see the handbook





NASA NIGHT SKY NOTES FEBRUARY 2022

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 to find local clubs, events, and more!

HANG OUT WITH THE TWINS OF GEMINI

BY DAVID PROSPER

The night skies of February are filled with beautiful star patterns, and so this month we take a closer look at another famous constellation, now rising high in the east after sunset: Gemini, the Twins!

If you're observing Orion, as discussed in last month's article, then Gemini is easy to find: just look above Orion's "head" to find Gemini's "feet." Or, make a line from brilliant blue-white Rigel in the foot of Orion, through its distinct "Belt," and then on through orange Betelgeuse. Keep going and you will end up in between the bright stars Castor and Pollux, the "heads" of the Gemini Twins. While not actually related – these stars aren't bound to each other, and are almost a magnitude apart in brightness – they do pair up nicely when compared to their surrounding stars. Take note: more than one stargazer has confused Gemini with its next-door neighbor constellation, Auriga. The stars of Auriga rise before Gemini's, and its brightest star, Capella, doesn't pair up as strikingly with its second most brilliant star as Castor and Pollux do. Star-hop to Gemini from Orion using the trick above if you aren't sure which constellation you're looking at.

Pollux is the brighter of Gemini's two "head" stars - imagine it has the head of the "left twin" - and located about 34 light-years away from our Solar System. Pollux even possesses a planet, Pollux b, over twice the mass of Jupiter. Castor - the head of the "right twin" - by contrast, lies about 51 light-years distant and is slightly dimmer. While no planets have been detected, there is still plenty of company as Castor is actually a six-star system! There are several great deep-sky objects to observe as well. You may be able to spot one with your unaided eyes, if you have dark skies and sharp eyes: M35, a large open cluster near the "right foot" of Gemini, about 3,870 light-years away. It's almost the size of a full Moon in our skies! Optical aid like binoculars or a telescope reveals the cluster's brilliant member stars. Once you spot M35, look around to see if you can spot another open cluster, NGC 2158, much smaller and more distant than M35 at 9,000 light-years away. Another notable object is NGC 2392, a planetary nebula created from the remains of a dying star, located

about 6,500 light-years distant. You'll want to use a telescope to find this intriguing faint fuzzy, located near the "left hip" star Wasat.

Gemini's stars are referenced quite often in cultures around the world, and even in the history of space exploration. NASA's famed Gemini program took its name from these stars, as do the appropriately named twin Gemini North and South Observatories in Hawaii and Chile. You can discover more about Gemini's namesakes along with the latest observations of its stars and related celestial objects at nasa.gov.



Image created with assistance from Stellarium.

Castor and Pollux are Gemini's most prominent stars, and often referred to as the "heads" of the eponymous twins from Greek myth. In Chinese astronomy, these stars make up two separate patterns: the Vermillion Bird of the South and the White Tiger of the North. What do you see? The Night Sky Network's "Legends in the Sky" activity includes downloadable "Create Your Own Constellation" handouts so you can draw your own star stories: bit.ly/legendsinthesky

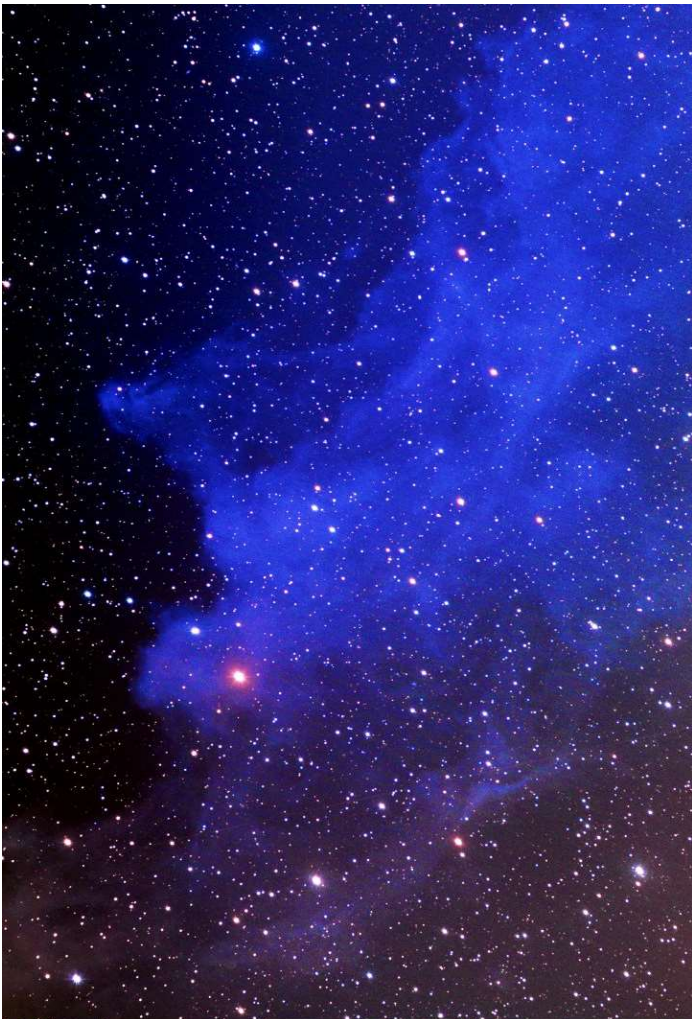


Image Credit: NOIRLab Source:
<https://www.gemini.edu/gallery/media/gemini-northsouth-montage>

Montage of Gemini North, located on Mauna Kea in Hawaii, and Gemini South, located on Cerro Pachón in Chile. These “twin” telescopes work together as the Gemini Observatory to observe the entire sky.

PICTURES BY HAC MEMBERS

IC2118 THE WITCH HEAD NEBULA BY JD MADDY



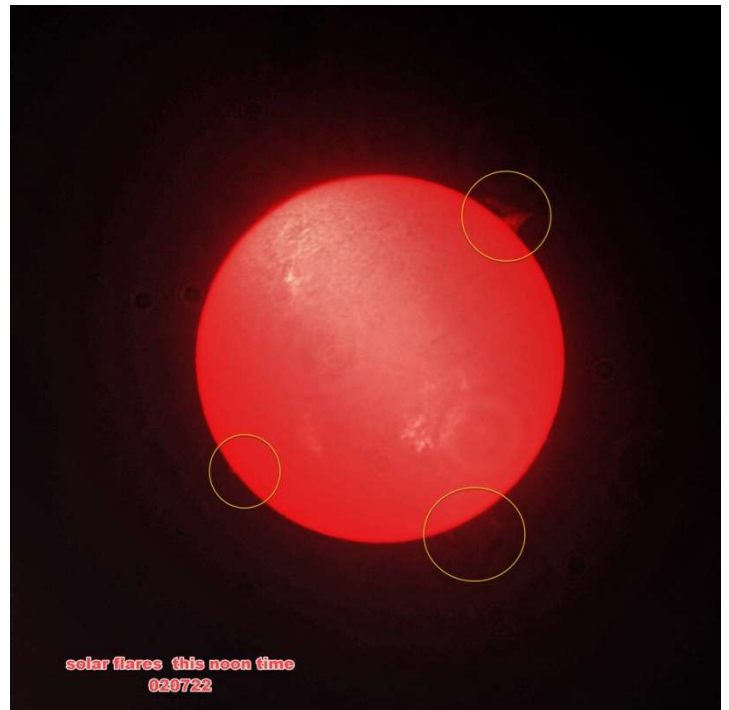
IOTA ORIONIS BY LEN AMBURGEY



NGC 1977 BY LEN AMBURGEY



SOLAR FLARES BY LEN AMBURGEY



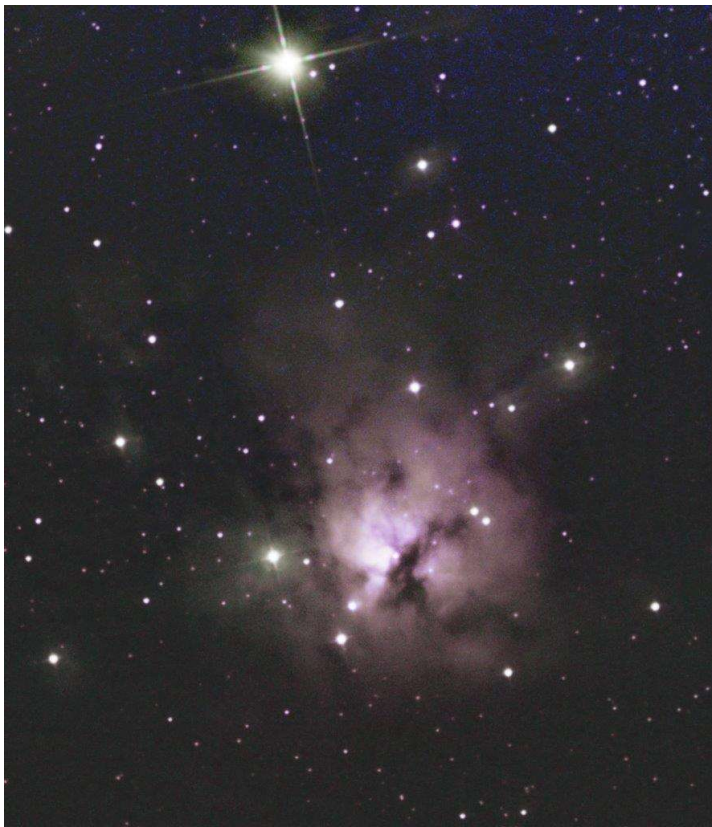
SUNSPOTS BY VINCE SEMPRONIO



NGC 4216 GROUP BY DAVID ROEMER



NGC 1579 IN PERSEUS BY GLEN SANNER



M 31 BY DAVID ROEMER



FOR SALE

Takahashi Mewlon 250 (10") About 9 yrs old. Seldom used. Dealer (Anacortes) installed field-flattener and upgraded manual focuser with an electric (computer-controllable) focuser. Asking just \$4,700. (new price ~\$ 8,000). Contact Alex Woronow at Alex@FaintLightPhotography.com (Alex lives in Silver City NM (SW Corner) but would meet a buyer halfway to deliver the scope).

FOR SALE

I own a Celestron NexStar 8 SE Schmidt-Cassegrain Computerized Telescope. A Celestron Power Tank. Eye pieces, and various other accessories. They are in excellent shape and am trying to sell the items. If anyone in your astronomy club is interested in purchasing, please contact me at the email address below. I will provide photos to anyone interested. Contact Craig Riley Email: criley1974@yahoo.com

FOR SALE

Mark Orvek is selling his Celestron AVX Mount. He bought the mount in 2015. The mount is ~\$999 new. He has the original shipping box and all of the original components including the NexStar+ hand controller, counterweight, power cable and instructions. He purchased an ACM dovetail, polar alignment scope and Celestron lithium battery pack separately which he will include in the sale. He'd be happy to deliver the mount to anyone in the general area (Sierra Vista, Bisbee, Benson, etc).



Patricia Houser has two telescopes to sell. Her husband was the astronomer, and can no longer pursue the hobby. She did not mention what the scopes are but would be open to potential buyers coming out to see them (Whetstone). That's all the information we have, so if you have questions please contact Ms. Houser directly at iamtennis@peoplepc.com

Celestron 6SE. (Schmidt Cassegrain) Includes two scope buggies for it. Also includes an equatorial tripod for the 2nd buggy. See pictures below
Contact JD Maddy at 602-672-2032 Will deliver



CLUB OFFICERS AND CONTACTS

President: Penny Brondum

Vice President: Karen Madtes

Secretary: Marion Goode

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Past Vice President: Dwight Hoxie

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Facebook: <http://www.facebook.com/HuachucaAstronomyClub>

Email: info@hacastronomy.org

PLEASE SUPPORT OUR SPONSORS














Our sponsors have been keeping us supplied in door prizes for some years. If you have not contacted them lately, please consider this. They have a lot of great astronomical products that we all need.

For more information on products and contact information, their websites are:

Farpoint Astronomy <http://www.farpointastro.com/>

Starizona <http://starizona.com/>

HAC Feb-Mar 2022 Calendar of Events

SU	MO	TU	WE	TH	FR	SA
30	31  10:46 PM	1 Feb	2 Groundhog Day	3 PAT Public Night 6:30PM	4	5 Cave Fest at Kartchner Caverns S.P. 9A-3P
6 (Cave Fest rain date)	7	8  6:50 AM	9	10	11	12
13	14 	15	16  9:57AM Venus W. Elongation	17 Berean Academy Students at Patterson Observatory 8:30AM	18 HAC Meeting ON ZOOM	19
20	21 	22	23  3:32PM	24	25	26
27	28	1 Mar	2  10:35AM Saturn/Mercury 1 degree	3	4	5
6	7	8	9	10  3:45AM Patterson Public Night 7PM	11	12 Beginners Class at Patterson. Telescopes. 2-3 PM
13 Daylight Savings Time Begins	14	15	16 Mars/Venus 4 degrees	17 	18  12:17AM HAC Meeting 7PM Community Room	19 Beginners Class at Patterson. Observing. 2-3 PM
20 Vernal Equinox 8:33AM	21	22	23	24  10:37AM	25	26 Beginners Class at Patterson. Equip Clinic. 2-3 PM
27	28 Venus-Saturn and the moon	29	30	31  11:24PM	1 Apr	

All times local MST

Join [HacAstro](#) to keep up to date with all of the Huachuca Astronomy Club events

Send an email to: HACastro+subscribe@groups.io

Watch the group for notice when in person events and meetings will resume