



# STAR STUFF

Ford Amateur Astronomy Club Newsletter

## Star Stuff

This newsletter is published eleven times per year by:

Ford Amateur Astronomy Club  
P.O. Box 7527  
Dearborn, MI 48121-7527

## Officers

President:	Arica Flores
Vice President:	Ed Halash
Secretary:	Jesse Godsey
Treasurer:	Joseph Bostic

## Departments

Webmaster:	Liam Finn
Membership:	Doug Bauer
Newsletter:	Tim Campbell
Equipment:	Jeff Gorman
Speakers:	Sandra Macika

## Club Information

The Ford Amateur Astronomy Club meets on the fourth Thursday of each month, except for the combined November/December meeting which meets on the first Thursday of December – at Henry Ford College Administration Services and Conference Center in Dearborn.

## President's Corner

*by Arica Flores, President*

December 7th will be our holiday Potluck (Finger foods) social. It will be an ***in-person-only*** event. Hope to see your there.

## Fall Constellations and the Stories Behind Them

Growing up a favorite movie was clash of the titans, which told the story of Perseus. Perseus, the Greek hero and son of Zeus, who killed the Medusa. Medusa was the Gorgon who turned people to stone when they looked at her. He also saved Andromeda, daughter of Cassiopeia and Cepheus, from the sea serpent Cetus. This story is told in the fall sky starting with Cassiopeia which is a circumpolar constellation used to guide us to other sky objects such as the Andromeda galaxy. We find this galaxy by drawing a line from the star Kappa Cassiopeiae through Schedar, in Cassiopeia which points the way to Andromeda.

We find Cepheus, her husband, by looking to the northwest of Cassiopeia. And our hero Perseus to the southeast of Cassiopeia. When looking at Perseus on the side away from Cassiopeia we find the star Algol, otherwise known as the Demon Star. These eclipsing binary stars vary between 3.4 and 2.1 magnitude as they circle each other from our point of view. Algol comes from not a Greek word but an Arabic word meaning head of the ghoul. This is our monster Medusa's head carried by our hero Perseus, with one of her eyes that could turn you to stone being our Demon Star. You just might want to be careful when looking up.

What hero would be complete without his mighty steed, or in our case a magical winged horse called Pegasus. The constellation Pegasus can be found by drawing a line from Polaris through the west end of Cassiopeia to the great square, which is the body of our winged horse. We find our sea monster Cetus below the constellation of Pisces. If we didn't have these constellations and their incredible stories what familiar things from our time would we find in the sky and tell stories about?

## Club Information

Refer to our website for a map and directions:

[www.fordastronomyclub.com](http://www.fordastronomyclub.com)

## Observing

The FAAC primary observing location is Spring Mill Pond located within the Island Lake State Recreation Area near Brighton, Michigan. The Club maintains an after-hours permit. Club members can contact any club officer for procedures to enter or exit the park when the main gate is locked.

The club also has use of a private observing site near Gregory Michigan. See the FAAC Groups.io Group for more information.

Inquiries can be directed to [info@fordastronomyclub.com](mailto:info@fordastronomyclub.com)

## Membership

Membership is open to anyone with an interest in amateur astronomy. The FAAC is an affiliate of the Ford Employees Recreation Association (FERA).

### Fees

Annual - New Members: \$30  
Annual - Renewals: \$25  
(\$30 if not renewed by Jan 31)

### Benefits

Membership includes the Star Stuff newsletter, discounts on magazines, discounts at selected

# Secretary's Report

*by Cheri Grissom, filling in for Jesse Godsey, Secretary*

## FAAC General Meeting – October 28, 2023

Meeting called to order at 7:01 p.m. by president, Arica Flores. Vice President, Ed Halash, and Treasurer, Joe Bostic, present. Secretary, Jesse Godsey, absent. We had nineteen in-person attendees and twelve online. Members and guests introduced themselves, including a couple new members.

### Member Observing Reports

Many of our members shared their experiences from Astronomy at the Beach last weekend. The club's 20" Obsession Dob was a big hit, with long lines each evening. Other members brought their own telescopes and shared views of the Moon, Saturn, the Andromeda Galaxy, the Owl Cluster, and many other objects. For many members of the public, this would have been their very first view of the night sky through a telescope. Jessica Edwards recently took a trip to Arches National Park in Utah and enjoyed the uniquely beautiful dark skies to be found there. Another member (sorry I did not get their name, I was online and the person was off-screen from my view) had the recent pleasure of visiting an island in the Caribbean, and was treated to all of Scorpius high in the night sky, and also reported that the entire Big Dipper was below the horizon, which of course is not something we ever experience in Michigan.

Arica reminded everyone that we have coffee cups with the FAAC logo for sale at \$6 each. Contact her if you are interested. This prompted discussion about club clothing with our logo. Tim Campbell explained the process of ordering through LLBeanBusiness.com. Further instructions can be found on our Groups.io page. Go to the "Files" tab, then click on "Club Logo-Wear." Discussion followed about whether we have any other options. Some suggestions were made for consideration.

### What's Up in the Night Sky

Gordon Hansen went over dates for our October meetings and events. As always, these can be found in our events calendars on Groups.io and [fordastronomyclub.com](http://fordastronomyclub.com). The annular eclipse will be October 14. It will only be partial for us here in Michigan. Gordon showed a graphic of

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area equipment retailers, and after-hours access to the Island Lake observing site and private observing sites.

Astronomy or Sky & Telescope magazine discounts are available by contacting the FAAC club treasurer [treasurer@fordastronomyclub.com](mailto:treasurer@fordastronomyclub.com) for the discount form. The form should be sent to the respective publisher with your subscription request and payment. Do not send money directly to FAAC.

The FAAC has a pool of equipment including telescopes, cameras, and other gear used for outreach. Much of the gear can be borrowed for personal use in the interest of furthering your knowledge and experience in astronomy.

Please see the equipment list for further information.

## Club Wear

Club logo-wear (embroidered with club logo) can be ordered directly through [LLBeanBusiness.com](https://LLBeanBusiness.com)

See the [groups.io](https://groups.io) files section for ordering information and instructions on how to request the correct logo.

## Communication

The FAAC uses Groups.io for our email distribution list (both formal and informal discussion.)

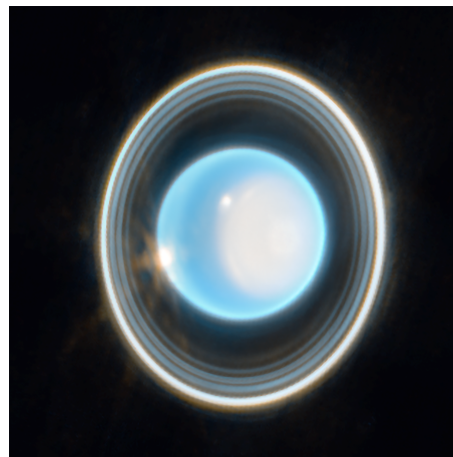
Observing nights & locations (scheduled and unscheduled as weather permits), equipment

# Spy the Seventh Planet, Uranus

by Liz Kruesi



You might be familiar with Saturn as the solar system's ringed planet, with its enormous amount of dust and ice bits circling the giant planet. But Uranus, the next planet out from the Sun, hosts an impressive ring system as well. The seventh planet was the first discovered telescopically instead of with unaided eyes, and it was astronomer extraordinaire William Herschel who discovered Uranus March 13, 1781. Nearly two centuries passed before an infrared telescope aboard a military cargo aircraft revealed the planet had rings in 1977.



Uranus hosts 13 faint rings, 11 of which are visible in this JWST image. The planet was 19.67 times the Earth-Sun distance from our planet (1.83 billion miles) when JWST captured exposures through two near-Infrared filters on February 6, 2023. The white region in the right side of Uranus is one of the planet's polar caps. This icy world orbits the Sun differently from the rest of the solar system's planets – Uranus rolls along on its side.

[NASA, ESA, CSA, STScI; Image Processing: Joseph DePasquale (STScI)]

Since that discovery, multiple observatories have revealed more details of Uranus and its ring system. Most recently, the NASA-led JWST space observatory captured the planet and its rings in detail. This recent image combines just 12 minutes of exposure in two filters to reveal 11 of the planet's 13 rings. Even some of the planet's atmospheric features are visible in this image. Even with advanced imaging like that from JWST, much of Uranus remains a mystery, including why it orbits the Sun on its side. This is because only one spacecraft has ever visited this planet: NASA's Voyager 2, which flew by the distant planet in the mid-1980s.

Planetary scientists are hoping to change that soon, though. Scientists recommended in a report released last year from the National Academies of Sciences, Engineering, and Medicine that Uranus be the focus on the next big planetary science spacecraft mission. Such a large-scale mission would gain insight into this icy giant planet and the similar solar system planet, Neptune.

questions, events, outreaches, etc. are normally discussed via this list.

Join by visiting <https://groups.io/g/FordAstronomyClub> to request membership.

## Articles & Submissions

Your submissions to Star Stuff are welcome! Send your story and/or images to the editor at: [starstuff@fordastronomyclub.com](mailto:starstuff@fordastronomyclub.com)

## Observatory

The FAAC maintains and operates the Hector J Robinson Observatory (HJRO) at Lincoln Park Schools.

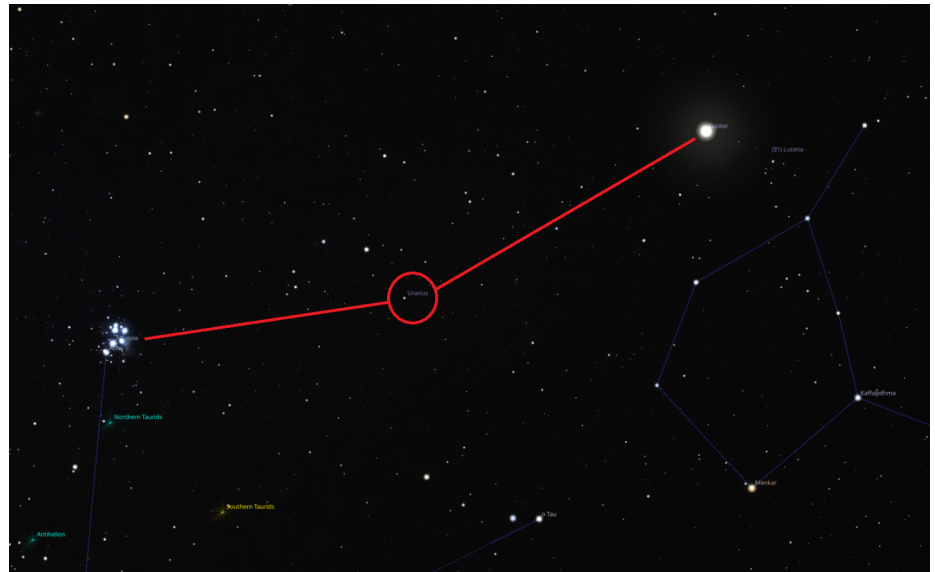
The observatory houses a 14" Celestron C14 Schmidt Cassegrain Telescope as well as other instruments and can be used by club members.

The observatory is adjacent to the athletic field situated between the Lincoln Park Middle School and High School buildings near

1701 Champaign Rd.  
Lincoln Park, MI 48146

The school system has designated four "key-holders" within the club who have the ability to open the observatory.

Call (313) 444-5850 to learn when the observatory is opening (or request an opening).



Sky map picturing M45, Uranus and Jupiter, Stellarium

If you want to catch a view of Uranus with your own eyes, now is prime time to view it. This ice giant planet lies perfectly positioned in mid-November, at so-called "opposition," when its position in its orbit places it on the other side of the Sun from Earth. That location means our star's light reflects off Uranus' icy atmosphere, and the planet appears as its brightest.



Sky map picturing M45 and Uranus, Stellarium

To find it, look overhead just after midnight on November 13. Uranus will lie about halfway between the brilliant planet Jupiter and the diffuse glow

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## Planetarium

FAAC members are volunteer operators for the Hammond Planetarium at Henry Ford College.

Planetarium shows are free and open to the public.

Four seasonal planetarium shows are offered per year with the stars and constellations of the current season as well as a multi-media presentation featuring select planets.

Public planetarium shows are normally the third Wednesday of each month at 7:00pm. Please see the planetarium schedule for specific times. It is posted here:

[fordastronomyclub.com/hfc-planetarium](http://fordastronomyclub.com/hfc-planetarium)

## Social Media

The FAAC has several social media accounts. Members are encouraged to join and follow them.

### Facebook

[facebook.com/FordAstronomyClub](https://facebook.com/FordAstronomyClub)

### Twitter

[twitter.com/Ford\\_Astro](https://twitter.com/Ford_Astro)

## Scheduled Club Events

Month	Date	Sunset	Location
April	13th	8:13pm	Spring Mill Pond
May	11th	8:44pm	Spring Mill Pond
June	15th	9:11pm	Spring Mill Pond
July	13th	9:08pm	Spring Mill Pond
August	10th	8:40pm	Spring Mill Pond
September	20 & 21st	7:32pm	Kent Lake Beach Astronomy at the Beach

## Upcoming Club Meeting Topics & Speakers

Meeting	Speaker	Topic
October 26	Sandra Macika	100 yr Anniversary of the Day we Discovered the Universe

## October Talk Details

### The 100th Anniversary of the Day We Discovered the Universe

*Sandra Macika,  
Ford Amateur Astronomy Club*

#### Talk Description:

Sandra's talk for October is for the one hundredth anniversary of the "Discovery of the Universe." She will discuss Edwin Hubble's discovery of the Cepheid Variable in the Andromeda Galaxy that ended the debate of "Spiral nebula" vs. "Island Universe" that lasted for over one hundred years.

#### Bio:

Sandra Macika worked for 20 years in California as a Quality Engineer / Quality Engineering Manager in the High-Tech industry. At the same time, she worked with NASA for seven years doing Meteor Shower Studies and worked with Lick Observatory for ten years doing Public Outreach when she lived in California. Sandra has a collection of over 160 Meteorites, Tektites and Impactites. She takes them to Schools, Scout Groups, Libraries and other Public Events.

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*Secretary's Report (Con't from Page 2)*

what we can expect to see. On October 20, there is an event our club typically participates in at Spiritus Sanctus Academy, in Plymouth. We need members to bring telescopes. There will be a good crowd of students, parents, and teachers. Our last official Public Observing/Beginners' Night will be on October 21 at Island Lake. That date coincides with when the Orionids Meteor Shower is expected to peak.

Gordon talked about comets that may be visible in the coming month. 103P/Hartley will be at perihelion on October 12. We also have C/2023 P1 (Nishimura), which will be in our skies both mornings and evenings but, unfortunately, will be too close to the rising/setting sun for decent views.

Prominent evening planets: Jupiter, Saturn, Uranus, Neptune. Morning planets: Mercury, Venus, Jupiter, Uranus. On October 9, Venus and Regulus will be very close to one another just before sunrise, with a crescent moon above them.

DSOs: October will be a great month to observe M31, the Andromeda Galaxy. Also, NGC 457, the Owl Cluster, also known as the E.T. Cluster.

*Club Business*

Equipment: Jeff says nothing new. Secretary's Report: Cheri was attending online this evening and advises the Secretary's Report from last month is in "StarStuff." Treasurer's report was given by Joe. Social Media: Liam says everything is up to date.

Tim Campbell gave a report on how Astronomy at the Beach went. Attendance figures from the park were 1200 for Friday and 2080 for Saturday. These numbers are a significant increase from last year. There was a NASA table present this year, due to the "Eclipse" theme. Their table was set up next to ours in the tent, and they were quite busy all night. They gave out free eclipse glasses. The raffle sponsored by GLAAC, in

spite of the arduous process of getting the permits needed, and then actually running the raffle over the entire weekend, turned out to be a great success. GLAAC is now in a good position financially to start planning next year's event.

Arica mentioned a couple of observing events coming up tomorrow: The Farmington Stargazers, as well as at U of M-Dearborn. FAAC members and their telescopes are always welcome.

There was a reminder that we will not have a general meeting in November or December on our usual fourth Thursday of the month but, rather, a combined November/December/Holiday Potluck meeting on December 7, which would normally be our board meeting date. Due to the nature of the meeting, it will be in person only, no online option for that meeting date.

Also, our very next general meeting, on October 27, will not be in the Berry Auditorium. Instead, it will be in Room E-123, the Ghafari Conference Room. A map will be sent out in advance.

*Speaker*

Eric Hintz gave a talk entitled "Got a Couple Hours at Your Telescope? Observing Short Period Pulsating Stars." Mr. Hintz is originally from the Akron, Ohio area and is currently serving as the Associate Chair of the Department of Physics and Astronomy at Brigham Young University, in Utah. He is also a section leader for short period pulsating variable stars at the American Association of Variable Star Observers (AAVSO). He has 35 years experience observing short period variable stars. He also enjoys working public star parties with a wide variety of telescopes.

Pulsating variable stars are literally expanding and contracting in size, and changing temperature, in a matter of several hours. The first pulsating star noticed from earth was in 1595 by David Fabricius, a Dutch minister. That star is known as Omicron Ceti,

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## Equipment

The FAAC maintain an equipment pool of telescopes, binoculars, cameras, and other equipment used for special events. Much of this equipment is available to members.

Each piece of equipment is either stored by a club volunteer who offers to be the caretaker of the item, or by the person who last borrowed the item.

Most equipment can be borrowed for one-month durations. At the end of the month, the borrower can extend the loan if no other members have requested it.

Some items are reserved for special events use and are not normally available to be borrowed.

If you are interested in borrowing an item, please contact either the current holder of the equipment, or contact the club equipment manager, Jeff Gorman, at [equipment@fordastronomyclub.com](mailto:equipment@fordastronomyclub.com)

Item	Held by	Item	Held by
<b>Telescopes</b>		<b>Display Items</b>	
TK1 Coronado Personal Solar Telescope (Doublestack) w/Meade Autostar Goto Mount	Jessica Edwards	Astronomy Event Sign (3' x 6')	Gordon Hansen
TK5 4.5" Reflector on Fitz GEM mount	Jerry Jamula	Astronomy Event Signs 18x24" (x8)	Liam Finn
TK6 8" Orion XT8i Dobsonian	Dan Smith	PVC Display Board - Folding	Sandra Macika
TK7 TPO 8" f/4 Newtownian Astrograph (OTA Only - no mount)	Gary Gibson	Banner - Small (24" x 32")	George Korody
TK8 20" f/5 Obsession Dob, Ladder & EP Kit	Liam Finn	Banner - Medium (24" x 72")	Sandra Macika
<b>Presentation Tools</b>		Banner - Large (32" x 16')	George Korody
Projector (older)	Jim Frisbie	Tri-Fold Presentation Boards	George Korody
Projector (newer)	Gordon Hansen	<b>Other</b>	
Projection Screen 8'	John McGill	Canopy (10' x 10')	Liam Finn
Projection Screen 6'	Liam Finn	Pop Cooler	Sean Pickard
Bullhorn	Liam Finn	TA Sky Quality Meter	Liam Finn
Speaker System w/Wireless Mic	Liam Finn	<b>Demonstration Tools</b>	
		Weigh on Planets Scale	Liam Finn
		Lunar Phase Kit	Bob MacFarland
		100' Scale Model Solar System Kit	Bob MacFarland
		NSN Meteorite (Outreach) kit	Sandra Macika

Item	Held by
<b>Imaging Cameras</b>	
C2 Meade Deep Sky Imager Pro III w/Autostar Suite	Gordon Hansen
C6 Canon 60Da Astrophotography DSLR and accessories	Tim Dey
<b>Other Imaging Equipment</b>	
CA1 Rigel Systems Spectrascopes	Gordon Hansen
C7 Canon EOS EF 70-200mm f/1.4L IS USM lens & tripod mounting ring (for Canon EOS cameras)	Gordon Hansen
Rokinon 8mm f/3.5 Fish-Eye Lens (Canon EOS Mount)	John McGill
<b>Special Event Items - Not available for Loan Out</b>	
BK2 Zhumell 25x100 Binoculars, hard case, & Zhumell TRH-16 tripod w/soft fabric bag	Sandra Macika
TAK1 Night Vision Image Intensifier for telescopes (2" barrel size)	Tim Dey
Lunt 100mm H-alpha Solar Telescope with Celestron CG-5 equatorial mount	Tim Campbell

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### *Secretary's Report (Con't from Page 8)*

or Mira. In the centuries since then, more discoveries have been made and pulsating stars have come to be more understood.

Mr. Hintz talked about what causes variable stars, why we care about them, and what they can teach us. New variable stars are being discovered at a rapid pace with large modern telescopes and the survey programs currently being conducted.

Mr. Hintz also talked about the various observatory facilities of the Brigham Young University and the telescopes contained in them, including the Orson Pratt Observatory on campus that houses a 24" PlaneWave telescope and several other large telescopes.

A question-and-answer period followed.

Meeting adjourned at 8:59 p.m.

## October 5, 2023 Board Meeting Summary

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(Videoconference meeting.) All board members present except for Jesse Godsey. Eight additional members present.

Sandra Macika will be our guest speaker at our general meeting on October 26. She will be talking about "The 100th Anniversary of the Day We Discovered the Universe." Our upcoming November/December combined Holiday Potluck meeting on December 7 will have no guest speaker and will be in person only.

The board has decided that, going forward, once a quarter, so March, June, September, and December, we will forego a guest speaker and have a Member Social Hour, where new members, or any member, may ask any questions they may have about equipment, astronomy in general, or any other topic of interest to the club, and receive answers from our more experienced members. This could be along the



line of “Ask the Astronomer,” or “Mini-Tech Talks,” etc.

The October 26 meeting will be held in a different location than the usual on the HFC campus. It will be in the Technology Building, Ghafari Conference Room (E-123). Notifications of the change as well as maps to the location will be provided to the membership between now and then.

Arica will be absent for our October meeting, so Ed, our VP, will preside over that meeting. Gordon Hansen will also be absent, so Tim Campbell will take care of setting up the audio and video equipment for the hybrid meeting. Tim will also do the “What’s Up” segment.

We had a discussion about the club equipment inventory, and the issue of new members perhaps wanting to borrow a smaller telescope than the 8” Orion Dob. The club does not currently own a small refractor, so Gary Gibson has generously offered to make one of his 3” refractors available for borrowing to members, and he will also look around for an inexpensive set of used eyepieces that could go with this telescope, since the club does not currently have a separate EP set in the inventory. We also discussed the club’s very large binoculars that are available for borrowing, but they do not have an appropriate, stable mount. The possibility of obtaining a parallelogram mount for these binoculars was discussed and will be looked into further.

After a lot of work by Arica and Joe, with help from past treasurer (and president), Mike Bruno, it was decided the club will start using Quicken as our accounting software. The price is more reasonable than QuickBooks, which we have been using but which has gone up substantially in price.

It’s time to think about who will be on our slate of nominees for 2024 officers of the club. Gordon Hansen has once again agreed to be the chairperson and will start putting together the members of the

nominating committee. All four of our officer positions are up for election each year, but our by-laws state a person may serve in a particular office for up to three years in a row, if they so wish. Stay tuned for more information from Gordon. Our election will be at the January meeting.

Our next Beginners’/Public Observing Night (and the last official one of the year), will be on October 21, at Spring Mill Pond. There is also an event at Spiritus Sanctus Academy, in Plymouth, the previous night, October 20, and they are inviting our members to bring telescopes. We are also hoping to soon have a new key-holder for the Hector J. Robinson Observatory at Lincoln Park Schools soon, and that may open up opportunities for club events at that location. We also talked about Lake Hudson, Richmond Airport, and of course Spring Mill Pond outside of our once-a-month Beginners’ Night, and how in the past, there were often times where members would get together outside of our regularly scheduled events and have spontaneous observing nights in those locations. Let’s try to do more of that! Communication via Groups.io makes it easy to convey plans and ask if anyone wants to join.

The Astronomy at the Beach event went well, with attendance up considerably from last year. The raffle was a success for GLAAC. About our FAAC table in particular, the consensus was we need to work harder to make our display more attractive to members of the public. Those present offered a few suggestions, and there will certainly be more discussion of this before next year’s event.

Discussion continued on how we can help generate more enthusiasm for our club in general, as well. Our future depends on attracting more new members to join and be active in the club. Several of our members have expressed the sentiments that one of the main reasons they joined the club was for the social element, and that seems to have been missing from our meetings for a while. Much of that is a result of

the pandemic years, which was beyond the control of any of us, but we can now work on getting back to the fun we used to have. We all will make an effort to follow through to make the club more attractive to all members, and club benefits easier to learn about and navigate.

### *Uranus (Con't from Page 4)*

of the Pleiades star cluster (M45). While Uranus may look like a bright blinking star in the night sky, its blue-green hue gives away its identity. Binoculars or a telescope will improve the view.

For more about this oddball planet, visit NASA's [Uranus page](#) page.

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### *October Talk Details (Cont'd from Page 5)*

Sandra has been the Astronomy Supervisor for Wayne/Oakland Science Olympiad since 2015 and has just signed on as Supervisor for the Wayne County Middle School and High School Science Olympiad. She is certified to help Boy Scouts earn their Astronomy badge. She has a 14.5 inch reflecting telescope. She is a Member of the San Jose Astronomical Association, Ford Amateur Astronomy Club, Warren Astronomical Society and Farmington Community of Stargazers.