

# VILLAGES STAR

Newsletter of The Villages Astronomy Club

**Volume 4, Number 8**

**August 2023**

Club Website (Currently Unavailable):

<http://vlgastroclub.org/>

Facebook:

<https://www.facebook.com/groups/vlgastroclub/>

## **Club Officers & Directors**

President Mark Graybill

Vice President Ken Katta

Secretary/Historian Burt Salk

Treasurer Linda Meng

Education Coord. Randy Gilbert

## **Newsletter Contact**

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(please include TVAstro in subject line)

## **UPCOMING EVENTS**

### **August 1st: Space Academy and Telescope Workshop!**

Join us on August 1st, when Space Academy will start at 6:30pm with “New Eye on the Sky”, a documentary on the James Webb Space Telescope. The video will be followed by discussion of the video and JWST’s revolutionary impact on astronomy and astrophysics after just a few months of operation. Telescope Workshop will begin at 7:30pm at the picnic pavilion, weather permitting. In the event of inclement weather, the workshop will move inside to the same room as Space Academy after the video.

The telescope workshop is for all users of telescopes, from beginner to experienced, to learn and to share information on observing, techniques, equipment, etc. Binocular viewers are welcome as well! If you want information on buying a telescope, we can try to assist you in

making a decision, and if you just want a look through a telescope, we can give you a view (so long as we are outside with a clear patch of sky!)

### **Executive Directors’ Meeting, August 4th, 11am**

All members are welcome to join our officers and directors at our monthly meeting to plan future events and activities for the club. We will be reviewing this years’ Camp Villages activities, and planning our many fall activities, including our Starry Starry Day and Night on October 7th, the Solar Eclipse viewing on October 14th, and our fall slate of speakers and regular activity meetings.

Meetings are at Fishhawk Recreation Center, 2318 Buttonwood Run, from 11a to 12p.

### **General Meeting, August 15th, 2023: Round Table: Your Astronomy Tools**

Join us as we get to know each other better and discuss the software, books, apps, websites, and other resources we enjoy or use for information about the sky. This meeting will be a round table format, where everyone will get a chance to talk!

### **August 19th, 5pm: Fruitland Park Astronomy**

The Fruitland Park Astronomy Club meets for an evening of observing and talk on the third Saturday of the month every month, conditions allowing, at the Cales Soccer Field in Fruitland Park at 300 Shiloh Road (at the corner of Shiloh Road and Dixie Avenue, north of the Fruitland Park water tower.) Village Astronomy Club members and the public are welcome. Bring your telescopes, binoculars, or just your eyes and your interest. Gate opens at 5pm.

Scopes can be set up directly off of tailgates onto pavement, or taken further into the park along paved walks, away from the road to avoid nearby lights. The front of the park has Bortle 5 skies. Power is available.

In the event of foul weather, the club is now able to use the pavilion at the Gardenia Park Recreation Complex, at 201 W Berckman St, Fruitland Park (across the street from Furniture Barn.) A talk on astronomy or observation will be given, along with instruction or assistance with telescopes.

**Calendar:** <https://vlgastroclub.org/calendar/>

## NEWS

### Club Website Offline

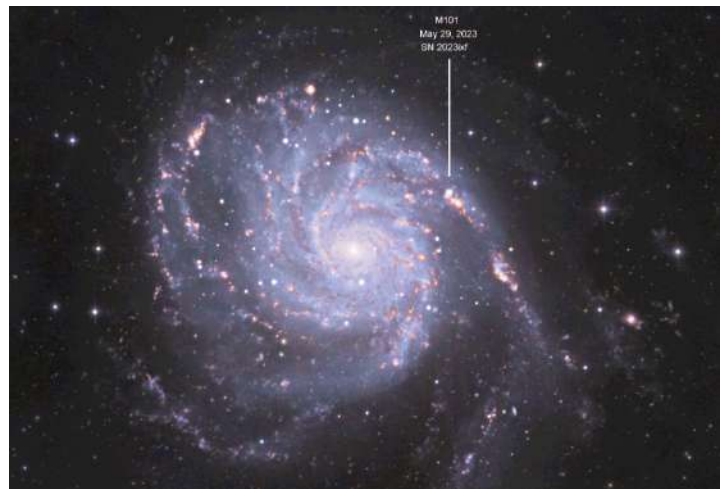
The webhost for the club's website suddenly went out of business in July, taking our website offline with it. After 25 years of reliable service, FutureQuest web hosting suddenly ceased operations on July 14th.

All data from the website (newsletter files, images, etc.) are backed up. Once a new web host has been chosen, we should be able to restore the site relatively rapidly, though likely with a new look. We have selected a service to test to see how well it fits our needs, and it's one that far less likely to disappear suddenly--Amazon.

We hope to have at least a minimal site up with an event calendar and contact information before August 8th, we will send out a message to the email list at its first availability.

Until the site is back up, keep your newsletter on hand, join us on our Facebook discussion group, and join us at our regular meetings!

Our president had used this same host for his personal websites since 2007, and this was the first problem with this web host he ever experienced. Unfortunately, he says he has a taller task to restore those sites than what lays in store for the club's site.



### Supernova 2023ixf in M101

Last May, the closest supernova in a decade suddenly appeared in galaxy M101. It was a Type II supernova, and explosion of a massive star from 8 to 50 times the mass of our own Sun. It became bright enough to see even

### Supernova 2023iixf in M101 image by member Darrell DuBose

with small telescopes. The supernova was identified as being of this type by the hydrogen lines in its spectrum. It was a subtype of the Type II supernova called Type IIL, identified by the linear dropoff of its brightness after its peak (hence the 'L' added to the name) as opposed to a IIP, which has a plateau in the brightness after the peak, where the light of the supernova extends over a longer period of time.

## IN THE SKY THIS MONTH

### The Moon:

Full Moon, August 1st

Last Quarter, August 8th

New Moon, August 16th

1st Quarter, August 24th

Full Moon, August 30th

The **Perseid Meteors** will peak in the early morning hours of August 13th. For over a week both before and after the peak, the meteors should put on a good show. This year's peak falls near the New Moon on the 16th, meaning little

interference from the Moon's light allowing more meteors to be visible. The Perseids are known for having a greater chance of fireballs (meteors of magnitude -3 or brighter) than other showers.

While the peak for the shower will be around 2-3am on the 13th, watching anytime starting from about 9:30pm on the 12th will catch a slightly reduced number of meteors, caused by the radiant point (the place in the sky where the meteors seem to come from) being low in the northwest, meaning that meteors the head toward the horizon from that point are unlikely to be seen.

**Saturn** reaches opposition on August 27th, where it sits in our sky directly opposite the Sun. It will be at magnitude -0.4 (quite bright!) and will subtend 19 arcseconds across its disk--its rings will cover over twice that span!

This entire month is a good time to observe Saturn. It rises just after 8:30pm at the start of the month, and at sunset at the end of the month. Its rings will be tilted only about 8 degrees from our view, making it difficult to observe the full breadth of the divisions within them, but they will still make a stunning sight.

**Neptune** rises shortly after Saturn, following it by about 45 minutes time in the sky. At magnitude 7.8 it takes binoculars at minimum to see it. Telescope will see it as a blue non-stellar object. Most telescopes can catch its brightest moons as well. Online finder chart:  
<https://in-the-sky.org//data/object.php?id=P8>

**Jupiter** rises at about 11:15pm at the start of the month, and shortly after 9 at month end. It starts the month at a very bright mag -2.4 and brightens slightly to -2.6 by month end. Its disk is just shy of 40 arcseconds at the start of the month and grows to 44 arcseconds at month's end. Like Saturn, it will be a showpiece of the August sky.

Four of Jupiter's moons are visible in binoculars or small telescopes. If you note the positions in which you see them, and the time of your observation, you can look up which moon is which on one of the online Jupiter Moon trackers.

**Venus** bows out of our evening sky in the

first few days of August, after several months of an impressive show as our Evening Star. After August 15th, it reappears in the dawn sky as a Morning Star.

**Mercury** gives a nice evening show continuing from late July through late August before it dives back behind the Sun. August 1st, it's at magnitude 0.0 in our western sky at sunset.

**Mars** follows close behind Mercury in the evening sky, though it will still be up into September. It shines at magnitude 1.8 through the month, and only 3.8 arcseconds across, requiring very clear skies and very high magnification to see any surface detail (350x or greater.).

**Uranus** rises about half an hour after Jupiter, and is at magnitude 5.7 which is too dim to be seen by eye under our local conditions. It can be seen in binoculars or a telescope, and can be found using a finder chart. It appears as a greenish or bluish non-stellar object. Chart:  
<https://in-the-sky.org//data/object.php?id=P7>

Telrad finder charts for the Messier objects can be found at the following web page:  
<https://sherwood-observatory.org.uk/astronomy/finder-charts/messier-finders>

More information on sky events this month:  
<https://in-the-sky.org/>

## Club Calendar

### August

**1** Telescope Workshop 7:30pm/Space Academy  
6:30pm, Truman Rec Center

**2** Camp Villages, Homestead Rec Center: Activity, solar walk, solar scopes

**4** Exec Meeting, 11am, Fishhawk Rec Ctr

**15** General Meeting: Round Table on your favorite apps, tools, resources, books, etc. for astronomy.  
Laurel Manor Rec Ctr, 6:30pm

**19** Fruitland Park Observing, Cales Field, 300 Shiloh Rd., Fruitland Park, gates open at 5pm.

Club Calendar on the web (once the website is back online):

<https://vlgastroclub.org/calendar/>