May 2021 Astronomy Update for the Chippewa Valley

Editor's note: *Astronomy Update is provided by the Chippewa Valley Astronomical Society and is compiled by Dr. Lauren Likkel, an emeritus of the University of Wisconsin--Eau Claire department of physics and astronomy.*

Figure caption: Some of the galaxies in the Virgo Galaxy Cluster are seen in this image taken with a telescope. The bright object on the left is an elliptical type galaxy known as "M60", and it is next to a spiral galaxy named "NGC4637". You can find another elliptical galaxy at the upper right, and a spiral galaxy near the bottom. Astrophoto by Keith Kleinstick, a member of the Chippewa Valley Astronomical Society.

"Springtime is for bigger telescopes"

By Kevin Litten

Springtime is here. Orion and Sirius are down below the horizon. The cold clear skies of Winter have been replaced by warmer winds and clouds. So, what do we have?

Well on those nights when the clouds give us a peek we've got something very special, but you may not like it. The constellation Virgo is the second largest constellation yet it has only one bright star with a few notable spiral and elliptical galaxies barely visible to binoculars. That bright star is Spica and it lies between Arcturus, the brightest star in Bootes, and the horizon. In Virgo's area of space is a supercluster containing probably 10,000 galaxies. Massive, awesome, wonderful sights to behold. If telescopes could spit then they couldn't spit in that direction without hitting a galaxy.

There is a line that hunters use, "Bring enough gun." It is a saying about having a tool sufficient for the job at hand.

To be seen well, most of the galaxies in Virgo will require a fairly large telescope. There are many positive things to say about a small telescope; it packs easily, it is quick to set up, and planets look great in them. The downside is that you don't get to see the Virgo galaxies.

A small refractor, a telescope with a lens up front, will often have a 60 to 90 millimeter diameter objective – the lens in front. A small reflector, a telescope with a mirror in the back, will have a 4 inch or less primary mirror. To see the Virgo Galaxies with either an objective lens or primary mirror, bigger is better.

You can see the Virgo Galaxies the way I first did, looking through the telescope at Hobbs Observatory.

The size of your telescope's objective lens or primary mirror is referred to as aperture. The boys with the big scopes are said to have "light buckets" because those scopes catch a lot of photons. They are usually glad to share or maybe show off. If you are in this hobby long enough an obsession known as "aperture envy" may kick in. If it catches you maybe you will let me look at those Virgo galaxies through your scope sometime.

The galaxies are there. You'll just need to "bring enough scope".

-- Kevin Litten is a recreational astronomer and a member of the Chippewa Valley Astronomical Society