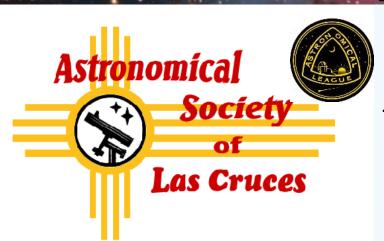
The High Desert Observer

July 2024



This Month's Meeting - July 26th

IN-PERSON & Zoom, Friday at 7 p.m. Mesilla Valley Radio Clubhouse 6609 Jefferson Ave. Las Cruces, NM

At the corner of Wilt and Jefferson -- take the Porter exit from US 70, about 5 miles east from the I-25 interchange. Go south on Porter until you come to Jefferson. From there, turn left and go to the corner of Jefferson and Wilt. The meeting will also be available to members via Zoom.

In This Issue

This Month's Meeting Presentation

Featured Article - Seeing Double

Kat Troche, NASA Night Sky Network

May Meeting Minutes - John McCullough

June Meeting Minutes - John McCullough

Member Images

Jeff Johnson, Alex Woronow Ed Montes, Tim Kostelecky Page 1

Page 3 Page 5 Page 7

Page 10

Tombaugh Lecture Series
Presentation for the Month

T Corona Borealis - Yet Another Once-ina-Lifetime Opportunity? Dodging the Hyperbole

Tim Kostelecky
ASLC President

Later this year, the cataclysmic variable star "T CrB" is predicted to exhibit an eighty-year cyclic explosion from a very dim 10th magnitude to near 2nd magnitude, which places it well into the brighter naked-eye visibility range (see Rich



Richins' article in the June HDO newsletter). Some news reports describe this as a once-in-a-lifetime spectacularity that will "light up the sky." In fact, there will be no visual spectacularity to it, other than the sudden and temporary appearance of a reasonably bright star (similar to Polaris, the North Star), in the constellation Corona Borealis. I will discuss much of the hyperbole around this and other events that may, unfortunately, set expectations too high for the general public. Yes, the periodic explosion of T CrB is a once in a lifetime event, but it would be better served if some in the media didn't set it up for disappointment.

The Astronomical Society of Las Cruces

(ASLC) is dedicated to expanding public awareness and understanding of the wonders of the universe. ASLC holds frequent observing sessions and star parties, providing opportunities to work on Society and public educational projects. Members receive electronic delivery of The High Desert Observer, our monthly newsletter, plus membership in the Astronomical League including their quarterly publication, Reflector, available in either paper or digital format. ASLC members are also entitled to a discount on a subscription to Sky and Telescope magazine. Annual Individual Dues are \$36; Family \$42; Student (Full Time) \$24. Dues are payable in January and partial year prorated for new members. Please contact our Treasurer, Patricia Conley, treasurer@aslc-nm.org for further information.

Coming Events

Monthly, on an evening close to the first-quarter moon, ASLC hosts a public "MoonGaze" observing session in Las Cruces. We also hold periodic special evening sessions at Tombaugh Observatory on the NMSU campus.

Also monthly, the ASLC welcomes public viewing at the Haas Observatory in Leasburg Dam State Park, located just 20 miles north of Las Cruces. Our 16-inch Meade LX200 telescope at this site is used to observe under rather dark skies.

Keep updated on the dates, times, and locations through this <u>link</u> with additional information available at our website <u>www.aslc-nm.org</u> as well as our Facebook page.

ASLC Board of Directors		board@aslc-nm.org	
President:	Tim Kostelecky	president@aslc-nm.org	
Vice President:	Ranimo Bush	vp@acslc-nm.org	
Treasurer:	Patricia Conley	treasurer@aslc-nm.org	
Secretary:	John McCullough	secretary@aslc-nm.org	
Director:	Mark Gorman	director1@aslc-nm.org	
Director:	Tracy Stuart	director2@aslc-nm.org	
Past Pres:	Ed Montes	PastPres2@aslc-nm.org	

Committee Chairs

ALCOR:	Patricia Conley	treasurer@aslc-nm.com
Calendar:	Stephen Wood	outreach@aslc-nm.org
Education:	Rich Richins	education@aslc-nm.org
Loaner Program:	Tim Kostelecky	loanerScopes@aslc-nm.org
Observatories:		
Leasburg Dam:	Steve Barkes	LDSPObservatory@aslc-nm.org
Leasburg Dam: Tombaugh:	Steve Barkes Open	LDSPObservatory@aslc-nm.org ASLCObservatory@aslc-nm.org
	-	, - 0
Tombaugh:	Open	ASLCObservatory@aslc-nm.org
Tombaugh: Outreach:	Open Stephen Wood	ASLCObservatory@aslc-nm.org outreach@aslc-nm.org

Featured Article

Seeing Double

By Kat Troche



This article is distributed by NASA's Night Sky Network (NSN). The NSN program supports astronomy clubs across the USA dedicated to astronomy outreach. Visit nightsky.jpl.nasa.gov to find local clubs, events, and more!

During the summer months, we tend to miss

the views of Saturn, Jupiter and other heavenly bodies. But it can be a great time to look for other items, like globular star clusters such as Messier 13, open star clusters such as the Coma Star Cluster (Melotte 111), but also double stars!

What Are Double Stars? If you have seen any movies or read any books that refer to having two suns in the sky, that would be a double star system. These star systems typically come in two types – binary and

optical doubles. Binary stars are two stars that are gravitationally bound and orbit each other, and optical double stars only appear to be close together when viewed from Earth, but in reality, are extremely far apart from another, and are not affected by each other's gravity.

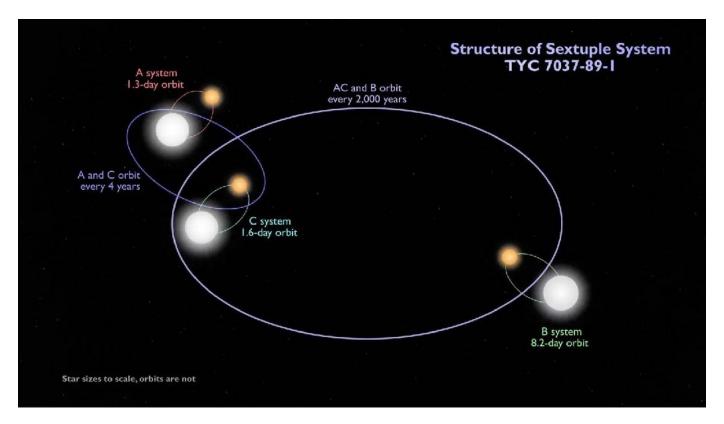
With a small telescope, in moderately light polluted skies, summer offers great views of these stellar groupings from the Northern Hemisphere:

- Double Double: also known by its technical name, Epsilon Lyrae, this multiple star system appears as one star with naked eye observing. But with a small telescope, it can be split into 'two' stars. A large telescope reveals Epsilon Lyrae's secret what looks like a single star is actually a quadruple star system!
- Albireo: a gorgeous double star set one blue, one yellow – in the constellation Cygnus.



Stellarium Web Sky Chart: https://i.imgur.com/L4V7KCa.jpeg

- Polaris: while technically a multiple star system, our North Star can easily be separated from one star to two with a modest telescope.
- Mizar and Alcor: located in the handle of the Big Dipper, this pair can be seen with the naked eye.



Sextuple Star System (Artist Rendition): https://i.imgur.com/QiksCrc.jpeg

Aside from looking incredible in a telescope or binoculars, double stars help astronomers learn about measuring the mass of stars, and about stellar evolution. Some stars orbit each other a little too closely, and things can become disastrous, but overall, these celestial bodies make for excellent targets and are simple crowd pleasers.

Up next, learn about the Summer Triangle's hidden treasures on our mid-month article on the Night Sky Network page.

ADDITIONAL LINKS:

https://science.nasa.gov/universe/stars/multiple-star-systems/ https://science.nasa.gov/universe/cosmic-couples-and-devastating-breakups/

NASA Night Sky Notes

Monthly Meeting Minutes May 2024

John McCullough - Secretary

Call to Order:

Tim Kostelecky, President, Astronomical Society of Las Cruces (ASLC, the Society), called the May 2024 meeting to order at 7:00 pm on 24 May 2024 at the Mesilla Valley Radio Clubhouse. There were fourteen (14) members, spouses, and guests in attendance, as well as ten (10) attendees via Zoom at the start of the meeting.

Tim welcomed the group to tonight's meeting and announced that the minutes from the April 2024 meeting (thanks to John McCullough, Secretary) were published in the May 2024 issue of the Society newsletter, the High Desert Observer (HDO). Tim asked if there were any required additions, deletions, or corrections to the minutes as submitted. There being none, a motion to accept the April 2024 minutes as submitted was offered by Bernie Jezercak and seconded by Nils Allen. There being no objections, the motion was passed by acclamation.

Presentation:

Tonight's Tombaugh Series presentation was by Katie Kizziar on "An Overview of the McDonald Observatory". University of Texas at Austin's McDonald Observatory is a world-class astronomical research facility located in the Davis Mountains of far west Texas. Ms. Kizziar's talk provided an overview of the Observatory including the history, facility highlights, research efforts, and public engagement that make up the Observatory's mission. McDonald Observatory's education and outreach team welcomes 75,000 visitors a year for telescope tours and star gazing, provides distance learning and teacher training programs for K-12 classrooms, and produces StarDate radio, magazine, and other educational resources to help expand humanity's understanding of the Universe.

Ms. Kizziar is the Assistant Director for Education and Outreach for McDonald Observatory. She holds degrees in engineering and public affairs and has worked in STEM education for over 20 years. She lives at McDonald Observatory with her husband and two dogs.

Tim recognized visitors Tom and Jennifer Miller. They have recently relocated to Las Cruces from Nebraska and are long time astronomy enthusiasts.

Officer/Committee Reports:

Treasurer:

Trish Conley, Treasurer, was not present at tonight's meeting. A report was not presented.

Outreach:

Stephen Wood, outreach coordinator, reported on recent and upcoming events. Events and attendance were:

++				
	Event	Date	Members	Visitors
	LDSP (3rd Qtr. Moon)	04 May	4	100
	May Moon Gaze	18 May	5	70
	Upcoming events are:			
	Event	Date		
	LDSP (3rd Qtr. Moon)	01 Jun		
	June Moon Gaze	15 Jun		

Contact Stephen if you can support any or all events. He would like to see more members support the smaller events with telescopes.

ASLC-West:

Mike Nuss reported the group held events at Rockhound State Park and City of Rocks (CoR) State Park on 03 May and 04 May, respectively. Approximately ninety (90) people attended at CoR, possibly thanks to a rhythmic drumming group performing prior to nightfall. Two other events will be at CoR this month: a Cub Scouts campout on 25 May and a special night on 28 May for an environmental group.

Old Business:

1. SeeStar Acquisition – The new SeeStar has been received from Agena Astro. Ed Montes, the primary operator for the unit, is becoming familiar with its operation. He reports its use is straight forward and intuitive.

There was no additional old business for discussion.

New Business/Announcements:

1. Alex Woronow donated a DDM60 mount to the Society. Mark Gorman has refurbished the mount, and it is operational. What is the disposition for this equipment? To evaluate interest in the mount, several members have proposed selling or auctioning it.

Tim proposed allowing the sale or auction of the mount to realize some percentage of its value (originally approximately \$8000). Bernie Jezercak offered a motion to that effect and Mark Gorman seconded. The proposal was accepted.

- 2. Both Tim Kostelecky and Ed Montes will be out-of-town the weekend of the June meeting. Ranimo Bush (Vice-President) will conduct the meeting. Andrew Colwell will make the presentation.
- 3. Ranimo reminded the members Las Cruces Space Festival 2024 is the first week of September (06-14 Sep).

There was no additional new business offered for discussion.

The May 2024 meeting was adjourned at 8:23 pm.

-Respectfully submitted: John McCullough Secretary, ASLC

Monthly Meeting Minutes June 2024

John McCullough - Secretary

Call to Order:

Ranimo Bush, Vice-President, Astronomical Society of Las Cruces (ASLC, the Society), called the June 2024 meeting to order at 7:01 pm on 28 June 2024 at the Mesilla Valley Radio Clubhouse. There were fourteen (14) members, spouses, and guests in attendance, as well as ten (10) attendees via Zoom at the start of the meeting.

Ranimo welcomed the group to tonight's meeting, noting she would be conducting tonight's meeting in Tim Kostelecky's (President) and Ed Montes' (Immediate Past President) absence. She announced that the minutes from the May 2024 meeting were not published in the June 2024 issue of the Society newsletter, the High Desert Observer (HDO), because of a publishing schedule conflict. They will be published in the July issue of the HDO, along with the minutes from tonight's meeting.

Presentation:

Tonight's Tombaugh Series presentation was by Andrew Colwell on "A Look into the Future of Programming at the Museum of Nature and Science". Andrew gave an update on the current Mission2Mars grant status, an introduction to the education department for the City of Las Cruces Museum of Nature & Science, as well as a look at an exciting astrophotography opportunity. Andrew Colwell is the Museum Curator of Education for the Museum of Nature & Science. The programs that he creates introduce science to the community of Las Cruces from pre-K to adult programming; he strives to create a space for space, dinosaurs, chemistry, and all other sciences that is inclusive, educational, and, most importantly, fun. Andrew holds a M.A. in anthropology from NMSU, and a B.S. in archaeology from the University of LaVerne. He has been working in education and science for the past 10 years and is currently living in Alamogordo with his wife and three cats.

Ranimo recognized repeat visitor Tom Miller and his son Terry. Terry is visiting from Australia where he works at the Queensland Museum in Brisbane.

\boldsymbol{c})ffice	r/Cor	nmittaa	Reports	
L	ハロし	:1/601	mmuee	Reports	١.

Treasurer:

Trish Conley, Treasurer, was not present at tonight's meeting. A report was not presented.

Outreach: Page 7

Stephen Wood, outreach coordinator, reported on recent and upcoming events. Events and attendance were:

Outreach:

Stephen Wood, outreach coordinator, reported on recent and upcoming events. Events and attendance were:

Event	Date	Members	Visitors
LDSP (3 rd Qtr. Moon)	01 Jun	6	50
June Moon Gaze	15 Jun	5	100
Tombaugh Observatory Open House	17 Jun	3	22
Starry Nights @ NMSU Golf Course*	21 Jun	3	0

^{*}This event was 'clouded' out

Upcoming events are:

Event	Date
LDSP (3 rd Qtr. Moon)	29 Jun
July Moon Gaze	13 Jul

Contact Stephen if you can support any or all events. He would like to see more members support the smaller events with telescopes.

Apparel:

Ranimo Bush, committee chair, reported she is working on acquiring new items with the ASLC logo.

ASLC-West:

Mike Nuss reported recent scheduled events have been clouded out. However, a special event for a group of wilderness appreciators and preservationists meeting in Silver City at City of Rocks (CoR) State Park was very effective. The Deming group is shutting down for the rest of the summer for 'monsoon' season.

Old Business:

There was no old business for discussion.

New Business/Announcements:

Mark Gorman reported on a Celestron mount that he has for sale. Refer to the June HDO for more information.

There was no additional new business offered for discussion.

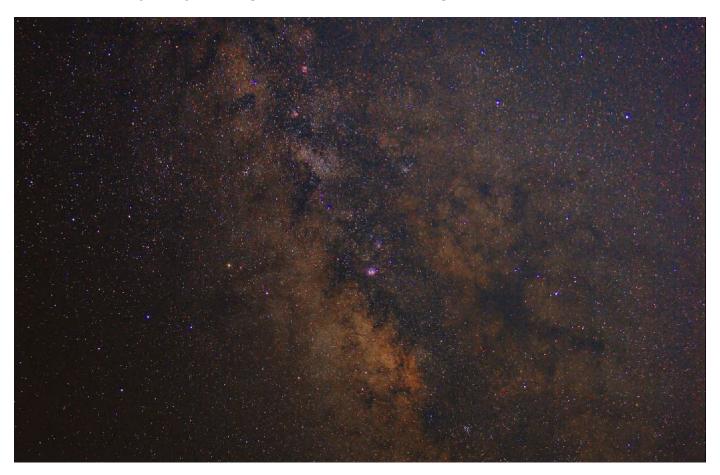
The June 2024 meeting was adjourned at 8:14 pm.

-Respectfully submitted: John McCullough Secretary, ASLC



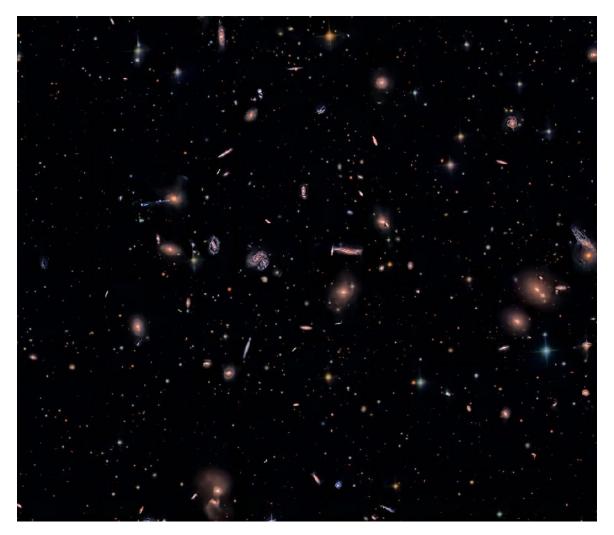
Member Images

Milky Way in Sagittarius/Scutum Region - Jeff Johnson



Same night as my earlier result and again from my backyard in Las Cruces. This was earlier in the night, and longer FL (24mm), as I wanted to zoom some into the center of our Milky Way. 27x90sec subs. You can easily see the Lagoon Nebula sitting there (center).

Hercules Galaxy Cluster - Alex Woronow



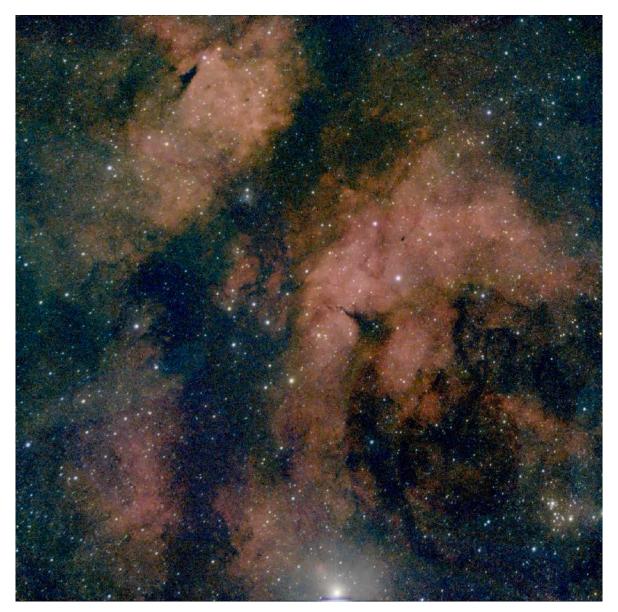
This is the Hercules Super Cluster of galaxies, many interacting. The total cluster size numbers between hundreds and thousands, and is relatively dense as galactic clusters go—hence the large number of interactions. The super cluster consists of many smaller clusters (including Abell 2151), and together, they are part of the "Great Wall," one of the largest known structures in the universe.

Veil Nebula in Cygnus - Ed Montes



"First-night" from my new ZWO SeeStar S50. About 8 minutes of 10 sec exposures - some editing of the exposure with my iPhone.

Sadr Region in Cygnus Tim Kostelecky



I was doing some variable star photometry in early July and as a bonus thought I'd try a "short" exposure of the nebulosity in the Cygnus Sadr region. This is a 15min composite with my TV85 f4.8 and ASI533MC; 30 sec subs, preprocessed with ASIAir Studio, final with Siril. I'll probably repeat with a longer exposure to quell the noise. For a quickie, I was pleasantly surprised how it turned out.