The High Desert Observer

March 2024



This Month's Meeting - March 22nd

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.

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Dave Doctor

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From the President Tim Kostelecky

Each month, I have the privilege of posting astronomy images in this ASLC Newsletter created by our members, and I've become accustomed to the high level of quality that's exhibited. It has become routine, but not taken for granted. With the recent publication of Dave Doctor's NGC1055 galaxy image for the NASA's March 15th Astronomy Picture of the Day, a great honor, (and as Mike Nuss noted on Page 2, a Dave Doctor image was also published in the December 2023 Sky & Telescope magazine) it drives home the fact that our ASLC has a terrific representation of world-class astro-imagers.

I'm in awe of the talent, and use it for an inspiration for my own imaging and sketching ambitions, but we also need to realize that much of the talent within the ASLC goes beyond what's readily apparent in the fine photos produced. Our group of volunteers devote a great deal of time and effort in spreading our knowledge and enthusiasm for the universe and night sky.

So it's in that vein, that I'd like to express my appreciation for those in the background that keep the ASLC a valued and vibrant organization...those who plan and contribute to our numerous activities, events and outreach programs. And of course, to our great imagers.

Thanks to all! Here's to clear skies and great viewing. -Tim Kostelecky

Tombaugh Lecture Series - Speaker for the Month

Tim Kostelecky

ASLC President

"Confessions of a Reluctant Astro-imager"

Tim Kostelecky has been a visual amateur astronomer for more decades than can counted on one hand. His resistance to delving into astrophotography has been mainly due to a couple of considerations: Cost and complexity. Not to mention Tim's always been of the opinion that there's a certain harmony with the universe that is best conveyed directly — photons to retina. But recently the cost and complexity barriers to imaging have come down, and it's time to explore that mysterious world of the astro-imagers. Will Tim be converted? In this presentation, he will examine this transition and how it can actually benefit his visual endeavors.



Currently president of the Astronomical Society of Las Cruces, Tim has been involved with outreach programs in astronomy since his college days, extending to volunteer stints at observatories in both Colorado and Washington state. Educated as a biologist/chemist, he retired from a 46-year career as a brewing & hops chemist — a pursuit that took him to breweries around to globe to provide education, training, and technical support. So, cheers to clear skies.

ASLC-West OutreachMike Nuss

First of all, I just want to comment on the great news about Dave Doctor's NASA Astronomy Picture of the Day accomplishment. In addition, I don't think anyone acknowledged that Dave had an image published in the December 2023 Sky & Telescope magazine. I saw it in there, but gave the copy to a friend and forgot about it. Amazing!

Regarding our resent outreach events for ASLC-West, we got clouded out on March 8th, Friday at Rockhound State Park, but we had a hefty showing of 35 participants on Saturday night at City of Rocks. Bill Nigg, Charles Turner and myself hosted the Saturday event.

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 <u>Facebook</u> page.

ASLC Board of Directors		board@aslc-nm.org	
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Committee Chairs

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Tombaugh:	Open	ASLCObservatory@aslc-nm.org

Featured Article

Constant Companions: Circumpolar Constellations, Part II

By Kat Troche



This article is distributed by NASA's Night Sky Network (NSN).

NSN program supports astronomy clubs across the USA dedicated to astronomy outreach. Visit nightsky.jpl.nasa.gov to find local clubs, events, and more!

As the seasons shift from Winter to Spring, heralding in the promise of warmer weather here in the northern hemisphere, our circumpolar constellations remain the same. Depending on your latitude, you will be able to see up to nine circumpolar constellations. This month, we'll focus on:

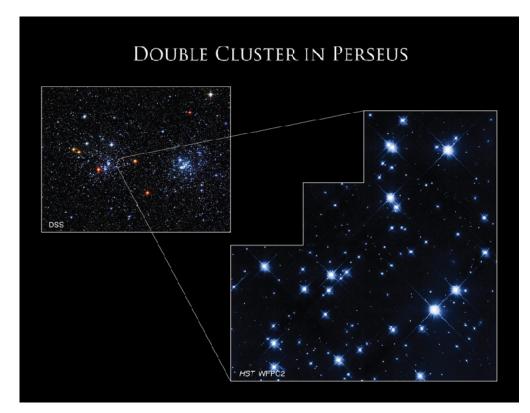
٧ n Χ Camelopardalis. and Perseus. The objects within h е s constellations can all be spotted with pair o f а binoculars or a small to mediumsized telescope, depending on your Bortle scale - the darkness of your night skies.

Double Stars:
 The area that comprises the

constellation Lynx is famous for its multiple star systems, all of which can be separated with a telescope under dark skies. Some of the notable stars in Lynx are the following:

- o 12 Lyncis a triple star that can be resolved with a medium-sized telescope.
- o 10 Ursae Majoris a double star that was once a part of Ursa Major.
- o 38 Lyncis a double star that is described as blue-white and lilac.
- Kemble's Cascade: This asterism located in Camelopardalis, has over 20 stars, ranging in visible magnitude (brightness) and temperature. The stars give the appearance of flowing in a straight line leading to the Jolly Roger Cluster (NGC 1502). On the opposite side





dim every two days, 20 hours, 49 minutes – for 10-hour periods at a time. For a visual representation of this, revisit NASA's What's Up: November 2019.

From constellations you can see all year to a once in a lifetime event! Up next, find out how you can partner with NASA volunteers for the April 8, 2024, total solar eclipse with our upcoming midmonth article on the Night Sky Network page through NASA's website!

of this constellation, you find the asterism Kemble's Kite. All three objects can be spotted with a pair of binoculars or a telescope and require moderate dark skies.

• Double Cluster: The constellation Perseus contains the beautiful Double Cluster, two open star clusters (NGC 869 and 884) approximately 7,500 light-years from Earth. This object can be spotted with a small telescope or binoculars and is photographed by amateur and professional photographers alike. It can even be seen with the naked eye in very dark skies. Also in Perseus lies Algol, the Demon Star. Algol is a triple-star system that contains an eclipsing binary, meaning two of its three stars constantly orbit each other. Because of this orbit, you can watch the brightness

ADDITIONAL LINKS:

https://science.nasa.gov/solar-system/ skywatching/how-to-find-good-places-tostargaze/

https://science.nasa.gov/solar-system/skywatching/what-are-asterisms/

https://www.youtube.com/watch? feature=shared&t=94&v=4mSETiiOpeg

IMAGE CREDITS:

Stellarium Web Sky Chart Image: https://i.imgur.com/ltO5P4h.png

Double Cluster in Perseus: https://i.imgur.com/NkxSBUI.jpeg

Monthly Meeting Minutes February 2024

John McCullough - Secretary

Call to Order:

Tim Kostelecky, President, Astronomical Society of Las Cruces (ASLC, the Society), called the February 2024 meeting to order at 7:00 pm on 23 February 2024 at the Mesilla Valley Radio Clubhouse. There were nineteen (19) members, spouses, and guests in attendance, as well as seven (7) attendees via Zoom at the start of the meeting.

Tim welcomed the group to tonight's meeting and announced that the minutes from the January 2024 meeting (thanks to John McCullough, Secretary) were published in the February 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 January 2024 minutes as submitted was offered by Bernie Jezercak and seconded by Mark Gorman. There being no objections, the motion was passed by acclamation.

Presentation:

Tonight's Tombaugh Series speaker was ASLC member Rich Richins, on "Once in a (Wratten #80A) Blue Moon". Astronomers use filters to better view or capture desired astronomical targets. Filters can help to overcome atmospheric limitations and to accommodate the quirks of human eyesight and imaging sensors. Properly used, an astronomical filter will increase the contrast between the target and its background enabling a better view (or better data capture). A variety of different types of filters are commonly

employed such as color filters, polarizing filters, neutral density filters, and interference filters (including light pollution and band pass filters). Rich shared additional specifics underlying the need for filters and reviewed the types of tools available to address various situations.

Rich received various degrees from Cal Davis and U. Ky. He spent his career primarily as a plant research biochemist at various land grant institutions. Twice he spun novel research projects into small businesses - both of which are still around today. In 1999, Rich moved from the Bortle 7 skies of Riverside, CA, to the relatively dark skies of southern New Mexico. Soon thereafter, he re-kindled a childhood interest in amateur astronomy. For the past 20-ish years, he has approached the hobby with the same creative experimentalist attitude that fueled his research career.

There were no new members and/or guests in attendance at tonight's meeting. Member Javier Ocasio was visiting from California.

Tim noted that last month's speaker, Mallory Conlon, Yerkes Observatory/Yerkes Future Foundation, had responded to several members' online inquiries and those were posted in the HDO.

Officer/Committee Reports:

Treasurer:

Trish Conley, Treasurer, reported that annual member dues for 2024 (due 01 January) continue to be paid. She reported net income of \$558 since the last meeting and \$1029 for the fiscal year to date.

Outreach:

Stephen Wood, outreach coordinator, reported on recent and upcoming events. Although the Tombaugh Elementary star party got cloudy late,

Event	Date	Members	Visitors
Tombaugh Elementary	02 Feb	5	150
LDSP (3rd Qtr. Moon)	03 Feb	6	30
Plutomania (10am - 1pm)	17 Feb	4	300
February Moon Gaze	17 Feb	5	20
Upcoming events are:			
Event	Date		
LDSP (3rd Qtr. Moon)	02 Mar		
March Moon Gaze	16 Mar		

previous events and attendance were:

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

ASLCWest:

Mike Nuss, ASLCWest coordinator, was not available for tonight's meeting. Instead, Charles Turner reported on recent activities in the Deming area. The events at Rockhound State Park and City of Rocks (CoR) State Park on 09 and 10 February, respectively, were 'clouded out'. Events next month will be on 08 and 09 March.

Old Business:

There was no old business for discussion.

New Business/Announcements:

Bob Kimball asked about members' intentions to observe the solar eclipse on 08 April. Several intend to 'park' along the path of totality. Bob noted the cost of hotel rooms along or near the path have sky-rocketed if they can be found. Nils Allen brough several reference books that he no longer uses or are duplicates in his library. They are for any members interested.

There was no additional new business offered for discussion.

The February 2024 meeting was adjourned at 8:27 pm.

-Respectfully submitted: John McCullough

Member Images

NGC 7331 in Pegasus - Jeff Johnson



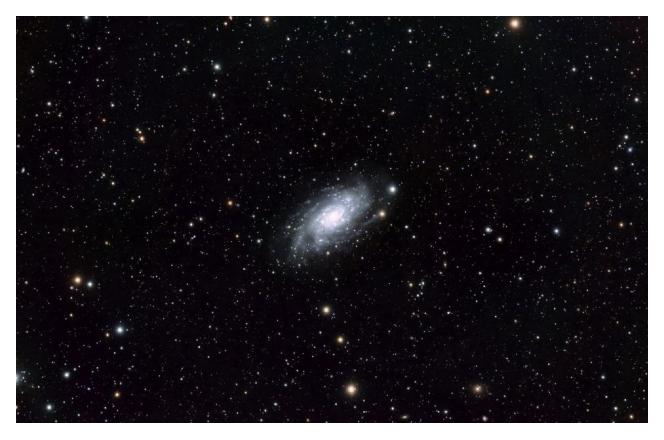
NGC 7331 - unbarred spiral galaxy in Pegasus (part of "Deer Lick Group") (image above is reduced-size crop | other sizes: medium, large)

Distance: 40 million light years (NGC 7331)

This FIRST LIGHT just blew me away. The best ever I had before this (using my TOA-130F ... no slouch!) can't even come close to this. Focal length and aperture just took this to the next level. The difference in detail is what blew my mind --- super happy and excited!

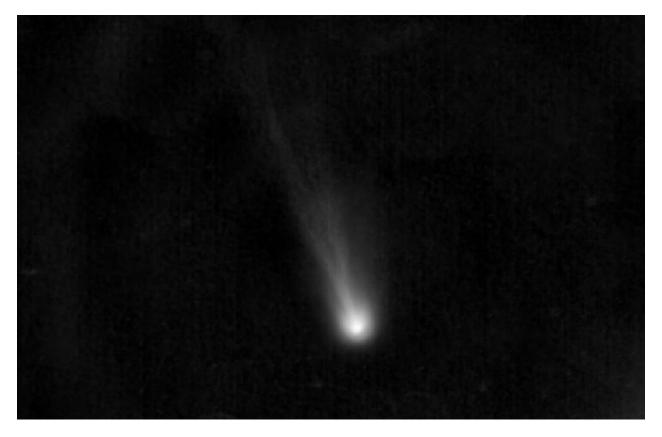
^{***} Small group of galaxies above NGC 7331 --- are ~300 million light years away!

NGC 2403 Galaxy in Camelopardalis - Bob Kimball



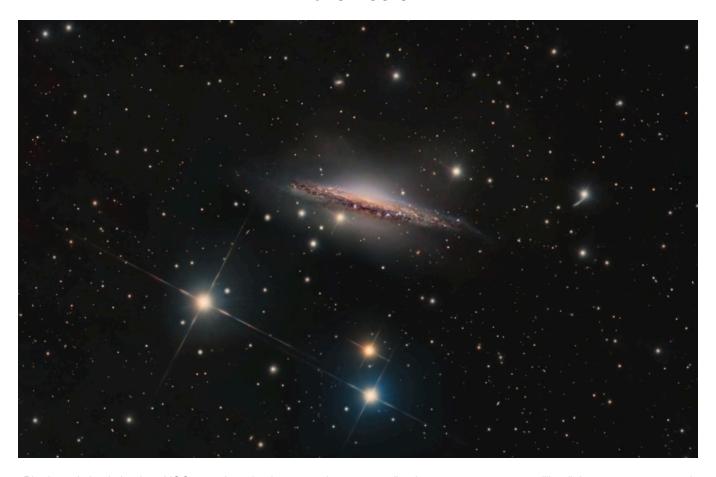
NGC 2403 is a large spiral galaxy nicknamed the "Miniature Triangulum Galaxy" due to its resemblance to the Messier 33 galaxy. It is located about 8 million light-years away in the constellation Camelopardalis and is an outlying member of the M81 Group. NGC 2403 is known for its numerous star-forming regions, including the giant HII region NGC 2404, and for being the first galaxy outside our Local Group where Cepheid variable stars were identified. It is visible with binoculars under good observing conditions.

Comet 12P/Pons-Brooks - Bob Kimball



This is my first attempt to image comet 12P/Pons-Brooks which is currently in the north-west after sunset. This is the result of 40 X 30 sec. luminance subs, but no flats or darks. Next time when it's clear I'll image it in color and it will look much better. Just know it's up there and reasonable bright.

NASA Astronomy Picture of the Day (March 15) - NGC 1055 Dave Doctor



Big, beautiful spiral galaxy NGC 1055 is a dominant member of a small galaxy group a mere 60 million light-years away toward the aquatically intimidating constellation Cetus. Seen edge-on, the island universe spans over 100,000 light-years, a little larger than our own Milky Way galaxy. The colorful, spiky stars decorating this cosmic portrait of NGC 1055 are in the foreground, well within the Milky Way. But the telltale pinkish star forming regions are scattered through winding dust lanes along the distant galaxy's thin disk.

With a smattering of even more distant background galaxies, the deep image also reveals a boxy halo that extends far above and below the central bulge and disk of NGC 1055. The halo itself is laced with faint, narrow structures, and could represent the mixed and spread out debris from a satellite galaxy disrupted by the larger spiral some 10 billion years ago.