

# The High Desert Observer

November 2023



## This Month's Meeting - Nov 17th

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.

### *Tombaugh Lecture Series*

#### Speaker for the Month

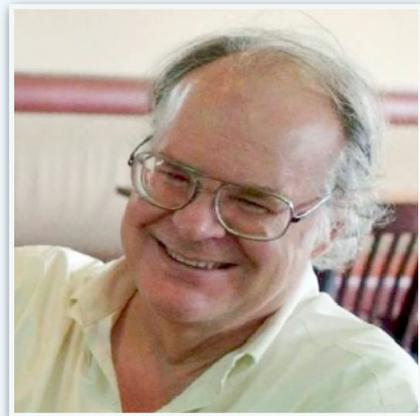
**Tod R. Lauer**

**Astronomer at NOIRLab, Tucson AZ**

### **How Dark is Space?**

Tod R. Lauer will attempt to answer the question of "How Dark is Space?" Does the Universe have a background of ordinary light? This question has been asked for decades, but has been extremely difficult to answer from the bright vantage point of the inner solar system. The New Horizons spacecraft is now in deep space far beyond Pluto, the darkest environment ever available to a telescope. With its instruments we have been able to make precise measurements on light given off by the Universe itself.

Lauer received a BS in astronomy from Caltech in 1979, and a PhD from the University of California,



Santa Cruz in 1983. He served on the research staff at Princeton University Observatory from 1983 to 1990, before joining the NOIRLab scientific staff. Lauer was a member of the Hubble Space Telescope WFPC-1 team, and in 1992 he received the NASA Exceptional Scientific Achievement Medal in recognition of his early work with the instrument. In 2014 Lauer joined the science team of NASA's New Horizons mission to Pluto and beyond. In 2018 Lauer also joined the Event Horizon Telescope collaboration, which obtained the first images of super-mass black holes.

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## Report from ASLC West

### Mike Nuss

Charles Turner and Bill Nigg conducted a private presentation for a large RV group at City of Rocks on November 8th. That same night Kevin Brown, Gary Starkweather and myself provided a Science Night presentation at the Animas Elementary School. Gary brought his 24" motorized Dob, a great astronomy equipped trailer, and gave the participants a chance to win great astronomical prints.

My telescope saw action when the line got too long at the big scope :)

We got clouded out on Friday the 10th for the Rockhound event.

On Saturday evening the 11th at City of Rocks, we had 32 viewing with us and got a great look at Comet Lemmon in dark clear skies.



## Featured Article

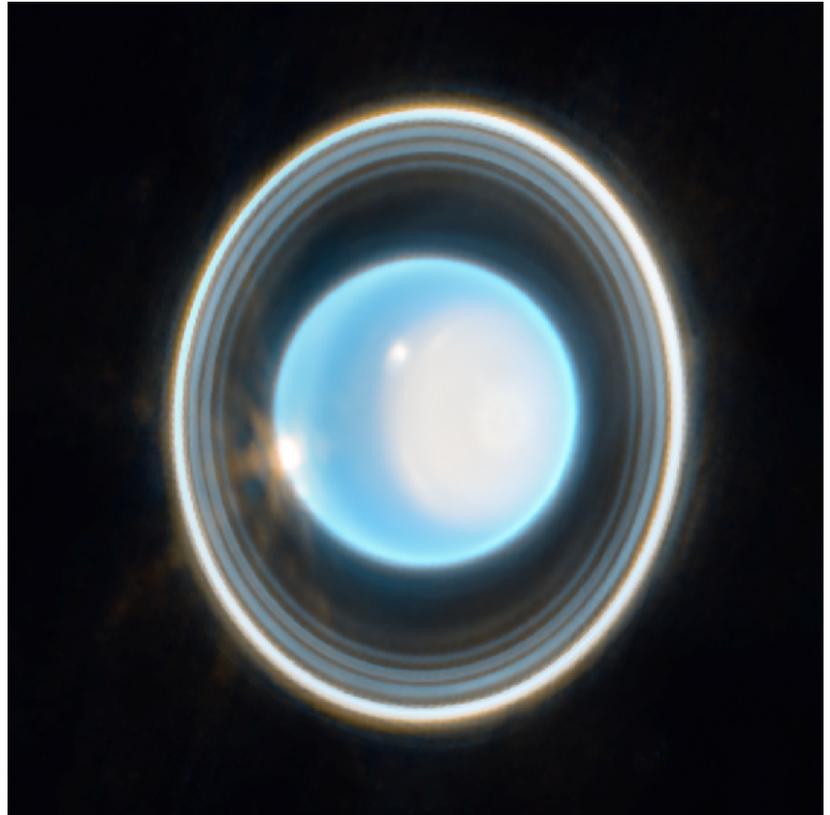
### Spy the Seventh Planet: Uranus



This article is distributed by NASA Night Sky Network. The Night Sky Network program supports astronomy clubs across the USA dedicated to astronomy outreach. Visit <https://nightsky.jpl.nasa.gov/> to find local clubs, events, and more.

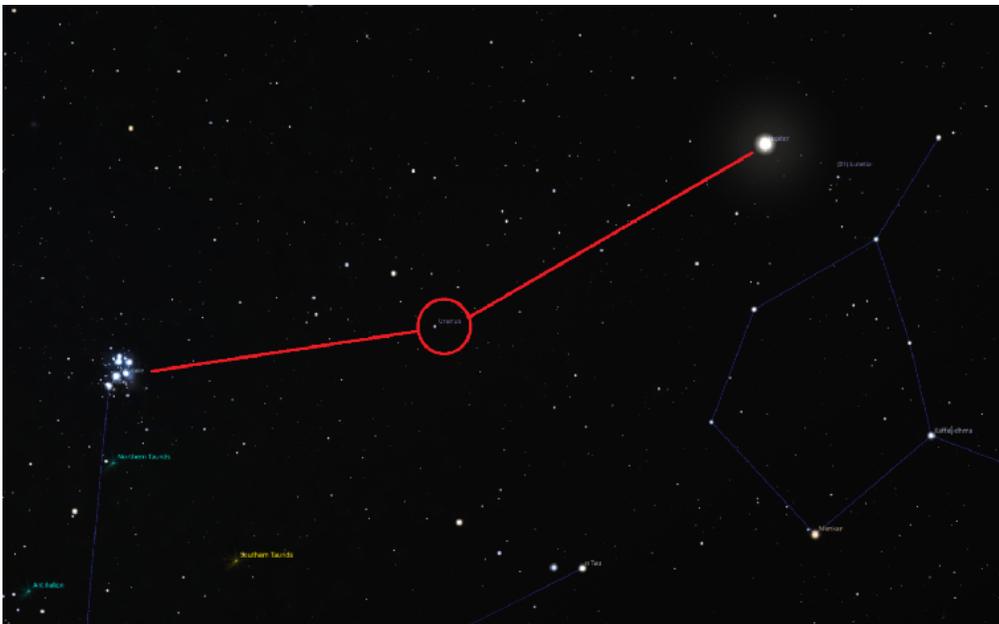
By Liz Kruesi

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.

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.

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.

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 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.

#### IMAGE CREDITS:

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



## ASLC Marketplace

John Kutney, long-time member of ASLC, has number of books, charts, and notes accumulated from his astro observing days that he's willing to provide to an ASLC Library (there is none at the moment) or directly to interested ASLC members. There are many detailed charts and guides for observers who want to observe, sketch, or learn about the contents.

The list below illustrates the many areas of interest for different observers. Anyone interested in any of these items, please respond to John's Groups-io listing from November 16th, or contact Tim Kostelecky at [president@ASLC-NM.org](mailto:president@ASLC-NM.org)

### Books and Charts

1. Planetary Nebulae (Astro League-77p)
2. Galaxy Groups and Clusters (Astro League-155p)
3. Globular Clusters (Longmont Astronomical Society-55p)
4. Globular Clusters (FaintFuzzies-112p)
5. Observing Globular Clusters (personal notes, classifications, and charts)
6. Herschel Objects [400] (Ancient City Astronomy Club-39p)
7. Observing Planetary Nebulae and SuperNova Remnants (FaintFuzzies-322p)
8. Flat Galaxies (FaintFuzzies-186p)
9. The Local Group (FaintFuzzies-56p plus list below)
  - M33 Globular's, HIII, Star Clouds and IC's
  - M31 Globular's, open clusters, etc.
  - Various LG Objects personal notes and charts
10. Local Group and Galactic Neighborhood Observations
  - Personal Observations and sketches (109)
  - Local Galaxy Group and its Amazing Dwarfs (notes and charts)

11. Lunar Charts and Observations (Charts, personal observations, notes)
12. Carbon Stars (Charts, personal observations, notes)
13. TRI-Atlas Mag12.5 (600 charts)
14. New Perspectives on Newtonian Collimation (Vic Menard)

### Notes Charts and Observations

1. Northern Arps (personal observations, notes and charts)
2. Abel Planetary Notes
3. Double Stars (personal observations, notes and charts)
4. Caldwell (Notes and charts)
5. Planets (Neptune and Uranus)
6. Messier (Lists, Marathon, Bino List)
7. Planetary Nebulae ( Lists, Pease 1)

### Maps

1. Jupiter
2. Mars
3. Moon

**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](mailto: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 Walter 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 [link](#) with additional information available at our website [www.aslc-nm.org](http://www.aslc-nm.org) as well as our [Facebook](#) page.

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**ASLC Board of Directors**      [board@aslc-nm.org](mailto:board@aslc-nm.org)

President:	Tim Kostelecky	<a href="mailto:president@aslc-nm.org">president@aslc-nm.org</a>
Vice President:	Ranimo Bush	<a href="mailto:vp@aslc-nm.org">vp@aslc-nm.org</a>
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Past Pres:	Ed Montes	<a href="mailto:PastPres2@aslc-nm.org">PastPres2@aslc-nm.org</a>

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**Committee Chairs**

ALCOR:	Patricia Conley	<a href="mailto:treasurer@aslc-nm.org">treasurer@aslc-nm.org</a>
Calendar:	Stephen Wood	<a href="mailto:Outreach@aslc-nm.org">Outreach@aslc-nm.org</a>
Education:	Rich Richins	<a href="mailto:education@aslc-nm.org">education@aslc-nm.org</a>
Loaner Program:	Tim Kostelecky	<a href="mailto:LoanerScopes@aslc-nm.org">LoanerScopes@aslc-nm.org</a>
Observatories:		
Leasburg Dam:	Steve Barks	<a href="mailto:LDSPObservatory@aslc-nm.org">LDSPObservatory@aslc-nm.org</a>
Tombaugh:	TBD	<a href="mailto:ASLCObservatory@aslc-nm.org">ASLCObservatory@aslc-nm.org</a>
Outreach:	Stephen Wood	<a href="mailto:Outreach@aslc-nm.org">Outreach@aslc-nm.org</a>
Website:	Steve Barks	<a href="mailto:Webslave2@aslc-nm.org">Webslave2@aslc-nm.org</a>
HDO Editor:	Tim Kostelecky	<a href="mailto:HDO@aslc-nm.org">HDO@aslc-nm.org</a>

## Monthly Meeting Minutes

### September 2023

#### John McCullough - Secretary

#### Call to Order:

Tim Kostelecky, President, Astronomical Society of Las Cruces (ASLC, the Society), called the October 2023 meeting to order at 7:02 pm on 27 October 2023 at the Mesilla Valley Radio Clubhouse. There were nine (9) members, spouses, and guests in attendance, as well as eleven (11) attendees via Zoom at the start of the meeting.

Tim welcomed the group to tonight's meeting, the 2023 Annual Meeting, and announced that the minutes from the September 2023 meeting (thanks to John McCullough, Secretary) were published in the October 2023 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 September 2023 minutes as submitted was offered by Tracy Stuart and seconded by Bert Stevens. There being no objections, the motion was passed by acclamation.

#### Presentation:

Tonight's Tombaugh Series speaker was Vanessa F. Gressieux, Program Coordinator at the Mt. Lemmon SkyCenter and Richard F. Caris Mirror Lab in Tucson, AZ. Her topic was "Welcome to the Richard F. Caris Mirror Lab – Building a New Generation of Telescopes".

Vannessa's presentation explored the history and function of the Richard F. Caris Mirror Lab, where her team creates the largest continuous telescope optic segments in the world. Vannessa discussed and illustrated the fabrication of several mirror elements utilized in several of the most advanced observatories currently active.

In addition to her administrative role at the SkyCenter and the Richard F. Caris Mirror Lab, Vannessa is an active part of the Tucson science communication and outreach community, serving as a NASA JPL Solar System Ambassador and an OSIRIS-REx Ambassador. Vannessa has worked at the Mt. Lemmon SkyCenter for over six years and enjoys sharing the science and wonder of the night skies with people of all ages. Originally from the East Coast, Vannessa fell in love with the dark skies of the Western US and appreciates the ability to see the Milky Way in the night sky. As a post-traditional dual major Astronomy and Communication undergrad, Vannessa helps support other students through her work with the ASEMS (Arizona Science Engineering Mathematics Scholars), who work to help students conquer the transition between community college and larger universities.

There were no new members or guests in attendance at tonight's meeting.

#### Officer/Committee Reports:

##### Treasurer:

Trish Conley, Treasurer, reported net income of \$75.52 for the past month. For the Annual Treasurer's Report, she reported a positive overall net income of \$1988 for the past year. Trish also reported the balances of the Society's various accounts. Copies of the report are available to members upon request.

##### Outreach:

Stephen Wood, outreach coordinator, reported on recent and upcoming events.

There were approximately one hundred (100) attendees at the Moon Gaze event on the Plaza de Las Cruces on 23 September. The Leasburg Dam State Park (LDSP) event on 07 October also had about one hundred (100) people on hand. Moon Gaze/International Observe the Moon Night also had a good turn out on 21 October.

There will be a private event from 11:00 am to

2:00 pm on 28 October at St. Paul's United Methodist Church. A private Math/Science Night will be from 6:00 pm to 7:30 pm on 02 November at Sunrise Elementary. The 2023 Renaissance Arts Faire will be the weekend of 0405 November at Young Park. A private event will start at 6:00 pm at Mission Academy on 07 November. There will be another private STEM Night from 5:00 pm to 6:30 pm at Vista Middle School on 08 November. The November LDSP event will be on the 11th.

Contact Stephen if you can support any or all events.

ASLCWest:

Mike Nuss, ASLCWest coordinator, reported on public outreach programs at Rockhound and City of Rocks State Parks on 0607 October. There were eighteen attendees at Rockhound and forty-five at City of Rocks the next night. The next outreach events will be 10-11 November.

Elections Committee:

Ed Montes, committee chairman, aided by Tracy Stuart and Trish Conley as elections tellers, enumerated the 2024 ballots received. The results of the election for 2024 Officers and Board of Directors members were:

President	Tim Kostelecky
Vice President	Ranimo Bush
Secretary	John McCullough
Treasurer	Patricia Conley
Director	Mark Gorman
Director	Tracy Stuart

Ed Montes will continue serving on the Board as immediate Past President

Old Business:

Renaissance ArtsFaire 2023 – This year's Faire will be 0405 November, the first weekend of November, at Young Park. The necessary applications have been submitted and the fees paid. Trish Conley needs to confirm telescopes for viewing and member images for donations. Members can support by helping with booth setup or take down or by manning the booth in costume during Faire hours. Trish has sign-up sheets for volunteers. There is an online sign-up available as well. This is a major annual public outreach event for the Society

Note: The LDSP monthly event normally scheduled for that weekend will be rescheduled for 11 November.

November Meeting – The November meeting will be held 17 November to not conflict with the Thanksgiving holiday weekend.

2023 Holiday Party – This year's party will be 16 December at Tim Kostelecky's home. More details pending.

There was no additional old business offered for discussion.

New Business/Announcements:

There was no new business offered for discussion.

The October 2023 meeting was adjourned at 8:13 pm.

-Respectfully submitted:  
John McCullough  
Secretary, ASLC

## NGC 2264 The Cone Nebula in Monoceros Kent DeGroff



This nebula is part of the Christmas Tree Cluster of bright stars. Other nebulae in this cluster include the Fox Fur Nebula and the Snowflake Cluster (both out of the field of view). S Monocerotis, a massive, bright star at the base of the cluster and also out of the field of view, provides much of the energy required to make this an emission nebula. The cone's shape comes from the cold molecular hydrogen and dust in front of the emission nebula. It's about 7 light years long and is 2700 light years away.

This image was redone from data taken in 2018 using AI processing steps.

## One More October Eclipse Mosaic - Bert Stevens



Here is the eclipse mosaic that I came up with from the October 14 annular solar eclipse. It was clear in Midland, TX where I observed this eclipse with a Meade ETX-125AT 5-inch (127mm) aperture, 1900 mm focal length, f/15 with 4.0 full aperture solar filter and a Canon 6D camera.

## Comet C/2023 H2 (Lemmon) - Nils Allen



Thought I'd try a short exposure of the new comet, just south of Altair. About 3 minutes...nice & green. I had to use my 20x80 binocs to find it visually, then pointed my Seestar50 in that area, taking images till I got one containing the comet...that took awhile (due to the smallish camera FOV). It's really moving fast, like a degree every 4 hours...that puts it in a new constellation every day or so! Also the weather looked bad after Sunday so I decided to put out the effort before it got too dim.

## A Lone Leonid - Steve Barkes



I thought I might catch a Leonid last night (Nov 13th), but the clouds came in after midnight.