

# The Fremont Peak Observer

— Bringing Astronomy to the Public —

Vol. 41, No. 3

Fall 2024

## President's Message



Pat Donnelly

Back in September 1957 (You remember 1957 – the year after the wheel was invented) a young boy, nine (9) years old, saw his first planet. He learned in school that Venus could be seen soon after sunset and would be known as the evening star. That autumn, Venus was well placed in the southwestern sky; a very bright evening star. Each evening, the young boy would sit in the window sill of his bedroom and watch Venus set – I was that boy. I tell this story to you now because in 2024, Venus is the autumn evening star – the same as it was in 1957. I still go in the evening and watch Venus set, whenever I can. If you want to experience true peace and tranquility, go to quiet, deserted spot with a low western horizon and watch Venus set.

By the time you read this article, most 2024 FPOA programs will be done for the year. This year has been a bit of a below average year. More than one evening program was lost due to cloudy weather, and the humidity and water vapor degraded the seeing on several occasions. The high point of the summer has been the solar programs. There have been numerous sunspots & prominences to observe. Moreover, the attendance at the solar programs has been above normal and the observing was much easier due to the new tripods. I want to thank Rob Hawley for doing the lectures during the evening

## 2024 Fall Program Dates

### Evening Public Programs

Sept. 7, 21, 28  
October 5, 12, 26

### Solar Programs

September 28  
October 26

### Board Meetings

September 21  
October 19  
November 16

Please check our [Status](#) and [Schedule](#) for updates before heading up.

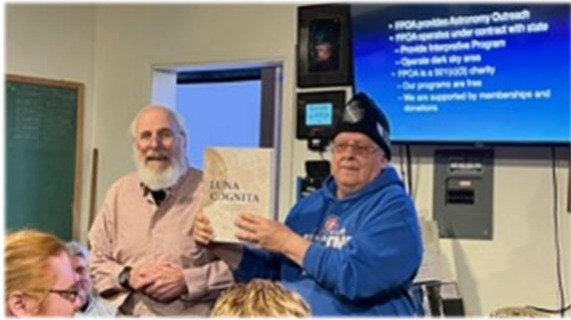


programs and for generating important safety and information videos. These videos help the public understand what we expect and how to observe safely in and around our facility. I look forward to completing public programs this year with some planets to observe (Venus and Saturn).

I would like to thank all of our members, who helped out with special programs. I for one, appreciate the sacrifices you made. It's important to note your commitments because of the unprecedented number of special programs scheduled this year.

Speaking of helpful members, I would like to introduce and welcome our new board member Rick Mazzarella who's been

a tremendous help rebuilding our fence, lending board experience, and volunteering this year.



FPOA had its annual Star-B-Que (SBQ) on August 24. Approximately 40 people attended, and all present seemed to enjoy the event. Robert Garfinkle donated a copy of his three (3) volume book set about the Moon; “Luna Cognita”. These three (3) volumes have just about everything we know about the Moon. Thank you, Mr. Garfinkle. I also want to thank all of the members of FPOA, who helped make our SBQ a success. The picnic area was cleaned up in record time, which made the rest of the evening easy. I really appreciate it.

Finally, I have a bit of news that should brighten the day of all FPOA members who travel to the peak. During a Zoom meeting with a member of the San Benito County Council, he indicated that the county is considering repaving San Juan Canyon Road up to the park entrance. Planning may start in 2025. Personally, I have waited for 38 years for some improvement of the road. However, repaving the road could have a negative impact on FPOA. In order to repair and repave the road, road access may resemble work done this last winter-spring. I can imagine it may be necessary to close the road when working on some of the narrower cliff hanging areas. Thus, some of our public programs in 2025 may not be possible. I will keep you informed.

PD

## State Parks Inspection

Rob Hawley

We met with the state on Monday Sept. 9<sup>th</sup> for our annual inspection. We did well and received a 98%.

We have some action items and suggestions from the meeting that we need to follow up on.

### Action Items

- We need to install a smoke detector - Rob has purchased one and will install next visit.
- Our log book now needs to record our volunteer hours/duration.
- We need to clear remaining construction materials from under the observatory.
- We need to remove the lupines near the Observatory entrance.
- We need to continue monthly inspections of the Fire Extinguisher although annual maintenance will continue to be done by the state.
- The state is looking into an FPOA 40-year recognition for 2026.

### Suggestions

- The state would like us to install a fire skirt. A perimeter skirt not only improves our fire survivability, but will also prevent young visitors from exploring under the building.
- The state discussed some additional flashing

They also provided us with an extra “Pay Here” sign that we intend to install near the observatory area entrance.

The current Parks administration has taken the time to understand our unique operation and recognizes how we differ

from a typical concession. Our 98% rating stands on Pat's and Rob's active administration ensuring that everything needed is supplied in a timely fashion.

RJH

## Observations



Pat Donnelly, Tom Kellogg

### The Summer Solstice and Stonehenge

Pat Donnelly

I am writing this article, because I was asked whether Stonehenge had any astronomical significance.

In the year 2024, the Summer Solstice occurred on June 20 at approximately 1:30 PM PDT. In addition, on July 4 at approximately 10:05 PM PDT, the Earth was its farthest distance from the Sun at about 94,510,500 miles. These events generate some interesting astronomical facts. Since the Sun is the farthest north at the time of Summer Solstice, the total number of hours the Sun is above the horizon is maximized. However, the total number of daylight hours near the solstice is approximately the same. For three (3) days on either side of the solstice, there is less than 1 minute difference in the duration of time the Sun is above the horizon. Moreover, during this six (6) day period the Sun's declination changes by only 1.2 arc minutes. Thus, all solar alignments will be essentially the same, and all solar illumination events will occur on each of these days. The ancient people, who wanted to know when the solstice occurs, needed something special to make the determination.

Enter the progression of six henges at Salisbury, England that led up to the current Stonehenge erected 3000-1520 BCE.

In order to determine when the Summer Solstice would take place, with any

accuracy, a special method is required. If one stands at the center of Stonehenge and watches the Sun rise behind the heel stone, the approximate date of the solstice can be determined. It seems impossible due to the minute changes in the declination of the Sun, especially with the naked eye.

Ironically, I was able to confirm the Stonehenge method, while I was in the United Kingdom in 1993. For about two (2) weeks on either side of Winter Solstice I was able to observe the sunset point on most afternoons. This was a minor miracle in itself, due to the normal weather condition in England in December. My observing location was on the fourth floor (third floor, if you live in the in UK) of the building, and the view extended southwest. There was a tiny tower about two (2) or so miles away on the horizon. I could determine the relative position of the last bit of sun above the horizon by using the tower. The tiny changes in the sun position could be determined. In fact, the afternoon closest to the solstice saw the sun set farthest to the south. It was years later that I realized what I had done. I confirmed the method that Stonehenge used to determine the solstice. Based upon this, I am all but convinced that Stonehenge was used for astronomical purposes.

PD



## Northern Lights at FPOA

*Tom Kellogg*

Friday May 10, 2024, six friends joined me at the Fremont Peak Observatory. I had seen the extremely large sunspot a few days prior, and had heard of speculation that the Northern Lights might appear all over the USA, but I figured it would not actually happen this far South. We had nearly 3 hours of observing through the 30" Challenger telescope; crescent moon, Arcturus, M3 globular, M51 Whirlpool Galaxies, M13 globular, NGC 6207 (galaxy 50 million LY away) which is in the same field of view as M13 while 2,000 times further away.

After buttoning up the observatory, while walking down to the cars, someone looked North and saw the Northern Lights. We all stood there for 20 minutes (11-11:20) as the colors, shapes, and intensity changed. Then suddenly, the show was over. Completely gone and we all stood there in stunned awe!



*TK*



*visitors enjoying darkness on the pads*

## Programs

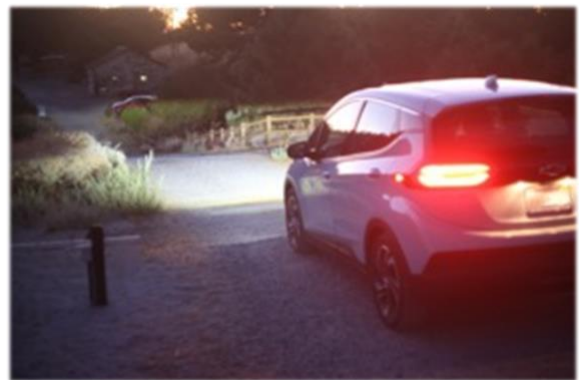


*Rob Hawley, Eric Eglund*

### Fall Dusk Parking Closure

*Rob Hawley*

As we move into Fall, darkness is going to start earlier. That means guests are also going to be arriving earlier. For their safety, and to avoid disrupting the program, we have always restricted the driveway from the restrooms to the observatory at dusk.



Since some new members have not been aware of this, Pat and I decided that we need to make this restriction more formal.

During the fall programs we require everyone who wants to park near the observatory to plan to arrive by sunset. (Please indicate an arrival time no later than sunset in your schedule@ reservation). The driveway to the observatory will close at the restrooms at Civil Twilight. After that, please park at the restrooms and walk up. Observers arriving late can still set up there (first come first serve in designated spots) as long as they do not block any of the other cars parked there from leaving.

This restriction will return for early dusks during our March and April programs.

*RJH*



## New Presentation Room Computer

*Rob Hawley*

The board thanks Jeff Crilly for his generous donation of a Mac mini. Since I do my presentations on the Mac, this will allow them to remain at the



observatory with fully running animations (my presentations make full use of the Mac's abilities) and with scripts so others can give presentations in my absence.

The PC remains for those preferring PowerPoint as well as an available HDMI cable for those bringing their own laptop.

The old projector is basically deprecated so no speaker should assume they will use that except during SBQ.

Starting Sept 7, I will start providing a lecture on Saturn.

*RJH*

## San Juan Days table

*Eric Egland*



Dropping post-COVID attendance at programs led us out into the world to attend local events and meet the people.

Several of us (Rob, Tom, Eric, and Rick) hosted our SJB Days table in the Mission Garden where, from our high perch, we could garner wandering Public to have a look through our instruments.

We brought a couple solar instruments, an Astroscan for late afternoon Moon gazing, astronomical binoculars, and a modern camera for demonstration.



Rob's new Sunspotter was a hit with kids and parents, and everyone enjoyed Tom's 6" reflector with a solar filter. I brought my Astroscan and a



pair of binoculars to attract the masses from the street. "Hey, what's that thing?"

At the end of the day, we entertained and educated about 200 visitors, handed out 90 brochures in English and Spanish, met Parks friends, and discussed publicity strategy with local businesses and organizations.

*EE*

## Facilities

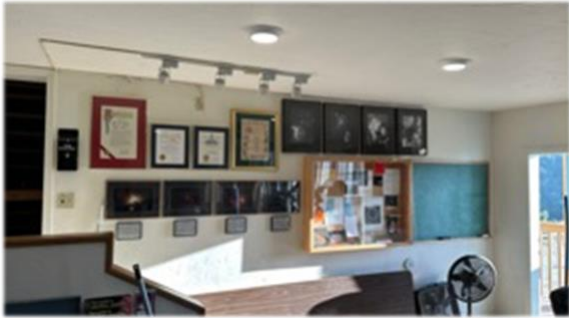


*Eric Egland*

All the painting is done. The old rusty rolling roof skirt flashing was treated with MP-7 liquid rust stabilizer, primed, and top coated with a siding-matching color (French beige).



The high porch arbor looks great after its touch-up and ready for Winter.



I hung the remaining recognition plaques and astrophotos with new sheetrock wall hangers. It seems right looking up at John Gleason's beautiful images.

Parts for a third 30" draw tube arrived and I'll be working on those soon.



We also replaced some missing fence lights and made repairs to the smashed electrical distribution box on the fence.

We have a new Parks request for fire skirting around the perimeter of the building. The recommendation supports previous board proposals, and we're thinking of designs that allow access.



*Ms. Jumping spider drops in on the west porch*

## Editor's Corner



Eric Eglund



What are you all doing out there? Please let us know by sending in Observer articles before the next publication date, December 1<sup>st</sup> or thereabouts.

Whatever you've been doing, travels, equipment builds, equipment failures, travel disasters, travel triumphs, travelling on Triumphs with telescopes, etc. Please send articles and/or photos to the [editor](#) the week of November 25th.

## Support



Thanks to those who renewed. FPOA receives most of its income from our memberships. Most annual members are now Observers. We still need your support. Contributions cover publications, phone, insurance, rent, etc.

Please consider volunteering, it's great fun and a service to our community. Please see the [back page](#) for details.

## Membership Renewal



To join or renew, please select from the list of options on our [Membership page](#) and pay via PayPal or mail a check to:

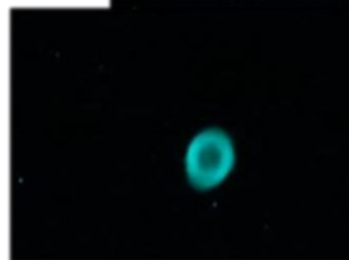
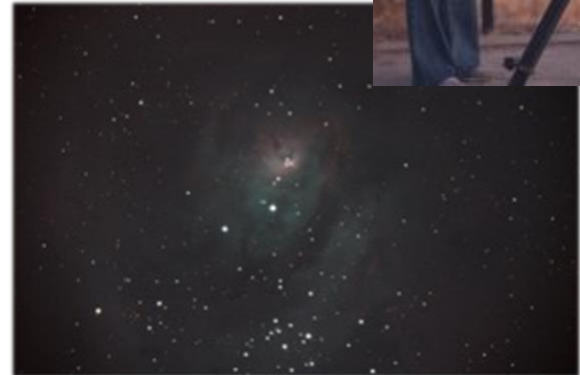
FPOA Membership  
c/o Rob Hawley  
1233 Hillcrest Dr.  
San Jose, CA 95120



# Gallery



*From top right CW: Alberio, visitor and the 10" SCT, M8, M57 with nebula filter, Challenger aperture, Garfinkle presents "Luna Cognita" at SBQ lecture, M22 through the 30", peak fog drifts in, Tom volunteers with Big Orange*





Public program visitor views Andromeda

## Fremont Peak Observatory Association

Box 1376, San Juan Bautista, CA 95045

Inquiries *info at fpoa.net*

Schedule *schedule at fpoa.net*

Membership *membership at fpoa.net*

Editor *editor at fpoa.net*

Treasurer *treasurer at fpoa.net*

Website: [fpoa.net](http://fpoa.net)

Facebook: [fpoa.observatory](https://www.facebook.com/fpoa.observatory)

X (Twitter): [fpoa\\_info](https://twitter.com/fpoa_info)

Observatory: (831) 623-2465

## Observing Reservations

Please send the following information  
**48 hours in advance** to:

*schedule at fpoa.net*

- Member name
- Reservation date
- Estimated arrival time
- Duration of stay
- Number in party
- Vehicle description and license plate
- Specific observing site request (pad)

**Reminder – 48-hour notice for Observer  
Access is non-negotiable**

*Please, No 'last minute' requests*

*We lease access to the FPOA area from the State. Our agreements with the State require we give 48 hours' notice for all visitors. Observer members agree to the 48-hour notice per the liability contract.*

## Public Program Volunteers

- Complete the updated [2023 liability waiver](#) and return to *membership at fpoa.net*.
- Also, please email name, vehicle, and the program date to *schedule at fpoa.net*.

## Officers and Directors 2024

<b>President</b>	Pat Donnelly
<b>Vice President, IT</b>	Windell Oskay
<b>COO (Treasurer, IT, Mbshp., Dist.)</b>	Rob Hawley
<b>Instruments, Schedule</b>	Ron Dammann
<b>Secretary, Editor, Social</b>	Eric Egland
<b>Facilities</b>	Eric Egland
<b>Special Programs Coord.</b>	Jeff Shapiro
	Chris Angelos
	Lenore Edman
	Tom Kellogg
	Rick Mazzarella
 <b>Directors Emeritus</b>	
	Kevin Medlock
	Denni Medlock
	Loren Dynnesson

## Dates and Delivery

Members, The Observer is now sent by email and posted on our website at [FPOA Observer online](#)  
Please send email updates to *membership at fpoa.net*.

The *Fremont Peak Observer* publishes four times a year following Winter, Spring, Summer and Fall. We welcome articles and photos from our members. Please email those to *editor at fpoa.net* by Mar. 1, June. 1, Sept. 1 and Dec. 1 in plain text or Word format.

