

The Fremont Peak Observer

— Bringing Astronomy to the Public —

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Spring 2023

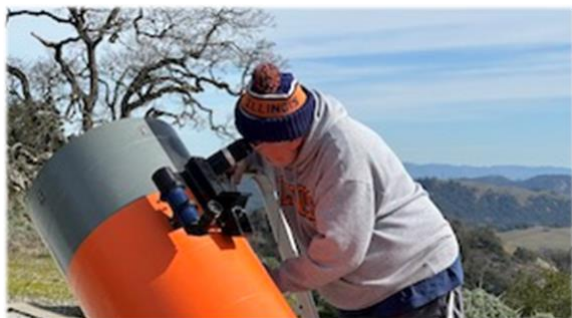
President's Message



Pat Donnelly

It is late March 2023. As I generate this column for the newsletter, Fremont Peak Observatory Association (FPOA) programs are cancelled due to winter storm damage on the road leading up to the state park and observatory. One of the hillsides next to the road gave way and destabilized a section of the road. As a result, San Benito County has closed the road and the Department of Parks and Recreation (DPR) has closed and locked the park entrance gate. At this time (3/28), road crews are working, but re-opening of the road, Park, and observatory are indefinite. I speculate that the road/Park/observatory will be closed for an extended period of time, possibly well into the summer months. FPOA has permission to go to the observatory for emergencies only. Please check the FPOA website for status updates on the observatory, observer access, and our public programs.

As far as the observatory itself, it has weathered this extraordinary winter season well. Except for some minor water intrusion next to the southeast door of the observing room, no additional degradation



2023 Program Dates

Programs are currently cancelled due to road damage and closure of Fremont Peak State Park. Please check current status at fpoa.net.

Saturday Evening Programs

March	18, 25	July	8, 15, 22
April	15, 22	Aug.	12
May	13, 20, 27	Sept.	9, 16, 23
June	10, 17, 24	Oct.	7, 14, 21

Solar Programs

March	18	July	15
April	15	Aug.	12
May	13, 27	Sept.	9
June	10, 24	Oct.	7

Board Meetings

Jan.	21	May	20	Sept.	16
Feb.	18	June	17	Oct.	14
Mar.	25	July	22	Nov.	11
April	22	Aug.	19		

Annual Meeting Star-BQ Aug. 19

has been observed. Rob Hawley and I travelled up to the observatory on Saturday, March 18. We found everything intact. It should be noted that the parade of winter storms is not over. Hopefully, we can get through the rest of the rainy season without any problems for the observatory.

I am happy to announce that Jeff Shapiro has agreed to join the FPOA board

as an alternate member. The board determined that an alternate member was needed, because one of the other board members, Loren Dynneson, was having health problems and may not be available for FPOA activities. I hope that Loren will make a speedy and full recovery. Over the past few months, I have been observing and admiring the planet Venus in the evening after sunset. I have also been observing Venus in the daytime with binoculars and on rare occasions with my unaided eye. When Venus is the evening star, she is usually visible to the unaided eye before sunset. To do this put a building between you and the sun. Venus should be easily visible. I became interested in astronomy, when I learned that Venus was a naked eye object. Since those days in the fall of 1957, I have observed Venus whenever I can. This year has been especially good for the observing of Venus. There has been a constant parade of planets and the moon past Venus with several excellent configurations. She is always a wonderful sight.

PD

Observations



Eric Egland

*Member news and insights from observing at FPOA and abroad. Send your story to **editor at fpoa.net**.*

Weather

The rain gauge at my home station reads 34.99" so far this year; very close to our 1981-1982 season total of 36" (sig. figs. unknown). I remember frog eggs, moss, and polliwogs in ponds around the house, landslides, getting the school bus stuck in the driveway, spending the school year

watching movies during recess, etc. Although we were watching a lot of movies, it seemed like a year without stars.

We're here again, and this time, we've had some peeks through cloud windows at some interesting phenomena this Winter.



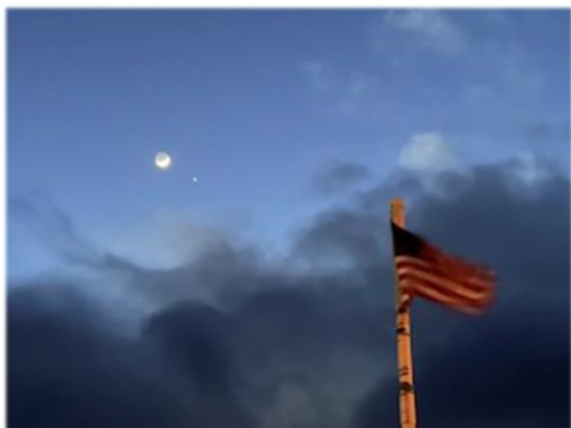
Moon halo on a cold night



The Orion Nebula through the 30" telescope imaged by the standard 1x lens on my mobile: F1.78, ISO 12,500, 1s



A Moon corona through stratus clouds with 1st and 2nd order birefringence, similar to a glory but in transmitted light. Quantum photon interference produces the colors.



The Moon and Jupiter from SJB with weather blowing in

Halos, coronae, and rainbows were everywhere this winter. Moon halos form when light interacts with high altitude ice crystals at 20,000 feet and higher. Coronae form as light diffracts through water droplets (fog, clouds).

Along with the show in the sky, canyons in our area were flowing with runoff. Above is a photo this season vs. 81-82 flow below at lower left with outflows from gopher holes. We'll be on wildflower watch this spring, and on fire watch this fall.

ETE



Facilities



Eric Egland

It's still a quiet winter season for facilities. During my late January visit, before the raging Pineapple Express storms of February through present, I installed blue painters' tape along the east entrance sweepers to divert water that was blowing into the building; or getting sucked in as wind blowing over the rolling roof drew a vacuum on the observing room through the track gaps. This summer, we'll close shutter top gaps and install supplemental flashing to better protect our new floor.

CAMS is operating normally; we replaced the digital timer that defaulted to OFF with every power outage and replaced 20 aging cameras. With a manual DUSK-DAWN dial timer, and the reliable UPS backup power supply, the Fremont Peak CAMS installation stands impervious to a few PGE outages.

Lectures



April 26th — Stanford Physics Bunyan lecture: Dr. John Mather, "[Opening the Infrared Treasure Chest with JWST](#)"; **7:30p**, Stanford Univ. Hewlett Teaching Center, Auditorium 200, 370 Jane Stanford Way

Support



Thanks to those who renewed in 2022. FPOA receives most of its income from Memberships. Most of the annual members are now Observers.

We still need your support. Contributions cover publications, phone, insurance, etc.

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

Membership Renewal



Rob Hawley

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

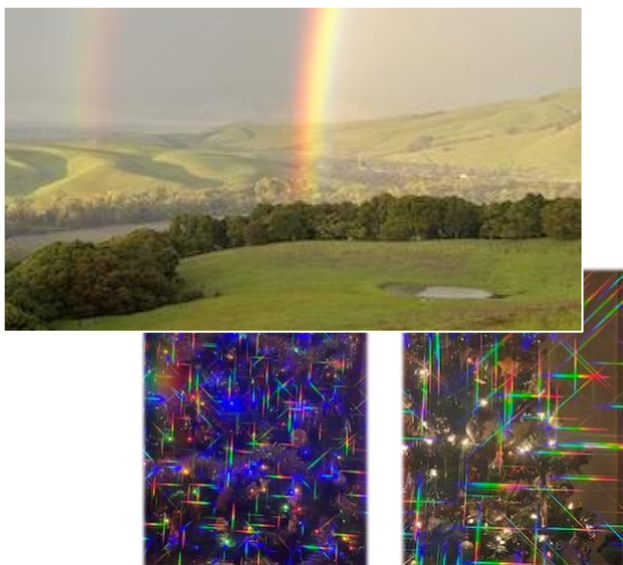
FPOA Membership
c/o Rob Hawley
1233 Hillcrest Dr.
San Jose, CA 95120



Gallery



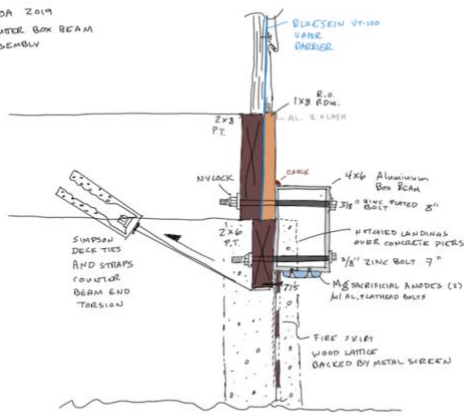
Comet c/2022 e3 (ZTF) at lower right (fuzzy star)



CW from left:
Holiday sunbeams, jet crosses under moon halo, Moon and Jupiter from the Peak, a mossy season, the gauge was always full, always face the ladder, comparative holiday spectra, a double rainbow w/ a good dark zone



FPOA 2019
SHUTTER BOX BEAM
ASSEMBLY



ETC

From the archives, shutter beam design in progress...

Fremont Peak Observatory Association

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General info
Schedule
Membership
Editor
Treasurer

info at fpoa.net
schedule at fpoa.net
membership at fpoa.net
editor at fpoa.net
treasurer at fpoa.net

Website: fpoa.net
Facebook: fpoa.observatory
Twitter: fpoa_info

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)

Officers and Directors 2023

President	Pat Donnelly
Vice President, IT	Windell Oskay
Treasurer, IT	Rob Hawley
Secretary	Lenore Edman
Instruments	Ron Dammann
Facilities	Loren Dynneson
Editor, Facilities	Eric Eglund
	Chris Angelos
	Tom Kellogg
	Jeff Shapiro
Instruments and: Schedule	Ron Dammann
Membership and: Distribution	Rob Hawley
Website	Rob Hawley Windell Oskay
Directors Emeritus	Kevin Medlock Denni Medlock



Public Program Volunteers



- Complete the updated [2022 liability waiver](#) and return to *membership at fpoa.net*.
- Also, please email name, vehicle, and the program date to *schedule at fpoa.net*.

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.