

# IO - June 2012

Eugene Astronomical Society  
Annual Club Dues \$25  
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EAS is a proud member of:

**The Astronomical League**  
The World's Largest Federation of Amateur Astronomers



## Next Meeting: Thursday, June 28th

### Seeing in the Dark

a PBS Video

At our June meeting we will be screening the PBS Video *Seeing in the Dark*. This highly acclaimed video chronicles the wonders of star gazing, from learning constellations to amateur astronomers doing professional grade research in discovering planets. It's a visual feast and an inspirational account of the many wonderful aspects of amateur astronomy.

One reviewer says "Magical and haunting, *Seeing in the Dark* is a beautifully photographed and inspirational account of the significant impact of amateurs in the field of astronomy. Even if you know little about the stars, you'll be enchanted by the imagery and engaged by the age-old question of man's place in the universe. This production should be the starting point of many interesting discussions, in and out of the classroom. Highly recommended."

Come to our June 28th meeting and enjoy. Bring your own popcorn. **NOTE THAT THIS MEETING IS IN THE TRAINING ROOM NEXT DOOR TO THE ROOM WE USUALLY USE.**

In addition to our video presentation, we also encourage people to bring any new gear or projects they would like to show the rest of the club. The meeting is at 7:00 on June 28th at EWEB's Community Room, 500 E. 4th in Eugene.

## Next First Quarter Friday: June 29

Our May 25 star party was clouded out after a promising sucker hole lured us all to the College Hill Reservoir. Our Saturday emergency backup star party had better sky but fewer people. Those few had a grand time, though, teasing out the fainter moons of Saturn, looking for the last bits of detail on receding Mars, and splitting doubles all the way down to Epsilon Lyrae. Clouds shortened that night, too, but not before everyone had a good chance to enjoy what the late-May sky had to offer.

Our next FQF will be June 29th, with a backup date of Saturday, June 30th if the 29th is cloudy.

First Quarter Fridays are laid-back opportunities to do some observing and promote astronomy at the same time. Mark your calendar and bring your scope to the College Hill Reservoir (24th and Lawrence in Eugene) and share the view with whoever shows up. Here's the schedule for 2012:

June 29 (82% lit)

September 21 (43% lit)

December 21 (69% lit)

July 27 (70% lit)

October 19 (28% lit)

August 24 (57% lit)

November 16 (15% lit)

# May Meeting Report: Spectroscopy

At our May 24th meeting, Bernard Bopp gave a talk on spectroscopy. Spectroscopy is the study of light itself, rather than the images it forms in an eyepiece. When light passes through a prism or a diffraction grating, it breaks into its component colors, and the bright lines or gaps in the spectrum can reveal many things about the object that emitted it.

Spectroscopy started out as the province of amateur astronomers before becoming a major tool for professionals, but it is still possible for amateurs to carry on the study. The advent of inexpensive spectroscopes and ever-larger telescopes combines to give amateurs the same tools that professionals were using not that many years ago. With amateur equipment we can observe the distinct spectral signatures of various types of stars and nebulae, the redshift of distant galaxies, and even the molecular composition of planets' atmospheres.

Bernard showed us examples of spectroscopic signatures and what they mean, the various equipment required to collect them, and some of the software for processing the data collected. Since spectroscopy is still well within the reach of amateur astronomers, he urged us to give it a try.

Our next meeting will be on Thursday, June 28th, at 7:00 PM in the EWEB north building's Training Room. This is the second room in the semicircular building to the north of the fountain at EWEB's main campus on the east end of 4th Avenue. (Not our usual room.)

Here's our meeting schedule for 2012. Note that we don't get regular Thursdays anymore, nor are we in the same room every time. EWEB has had trouble scheduling its meeting space to meet all the demand, so we've had to take what we can get.

June 28 (Thursday, Training Room)

August 23 (Thursday, Community Room)

October 17 (Wednesday, Community Room)

December 20 (Thursday, Training Room)

July 26 (Thursday, Training Room)

September 19 (Wednesday, Community Room)

November 21 (Wednesday, Community)

## A Clear Night at Eagle's Ridge

On Friday, May 18th, EAS members Dan Rinnan, Alan Gillespie, and Jerry Oltion made a run to Eagle's Ridge under iffy sky. Their gamble paid off with dissipating clouds, good transparency, and light-jacket temperatures all night.

Alan spent the night taking photos, including this one of Jerry's scope looking into the Milky Way.

It was a great night for galaxies. Markarian's Chain became Markarian's Mob in the 20" scope. M51 was like a Hubble photo straight overhead. The Needle Galaxy (NGC 4565) in Coma Berenices filled the eyepiece, as did the Sombrero in Virgo.

Come share the view next time!



Copyright © by Alan Gillespie

The Summer Triangle and Milky Way, plus scope and observer

# EAS Library Display

The Eugene Public Library's summer reading program themes for this year are "Dream Big" and "Own the Night," so the library staff thought an astronomy display would be appropriate. They asked the EAS to fill two large glass cases with interesting astronomy gear, and on May 8th we did so. Sam Pitts and Kathy & Jerry Olton took dozens of items ranging from astrophotos to entire telescopes and filled both cases to the brim. Items on display include four complete telescopes, mirror-grinding tools, a finished mirror, a celestial globe, a Moon globe, and many of Sam's amazing astrophotos.

The cases are on the second floor just inside the door to the magazine room. Check them out next time you're in the library.



## Thank You Castle Storage

For the last five years, Castle Storage has generously provided EAS a place to store its telescopes and equipment. EAS would like to thank Castle Storage for their generosity and support for our group. Please give them a call if you need a storage space, and tell your friends. They are great people and offer secure and quality storage units.





# Solar Eclipse Party

On May 20th the EAS joined with the Science Factory to hold a star party for the partial solar eclipse. We had about 10 solar-filtered telescopes on hand for a crowd of about 200 people. The sky was overcast, but the clouds were light enough that the Sun could be seen through them most of the time. People were excited by the view through our telescopes even though the clouds blurred the image pretty badly at times. Fortunately the clouds thinned during the maximum eclipse, and we all got a good view.



Solar shades were a popular item. The Science Factory sold 600 sets before the event, and the EAS sold another 250. We were sold out within 10 minutes of setting up shop. People were sharing them around all afternoon.

The sky (and everything else) got noticeably darker as the eclipse neared its maximum. Some birds began roosting for the night and swallows came out to feed on night bugs that became active. The temperature dropped a few degrees.

Several EAS members took photos of the event. Here are a few from various places we observed from.



Copyright © by Jerry Olthion

The view from the Science Factory



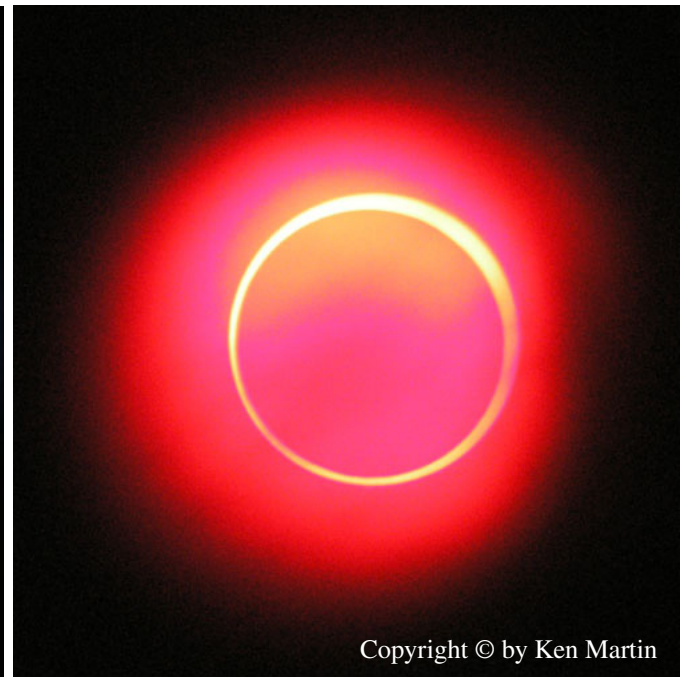
Copyright © by Jeff Phillips

The view from Crow/Loraine



Copyright © by Mel Bartels

The view from south of Cottage Grove



Copyright © by Ken Martin

The view from northern California

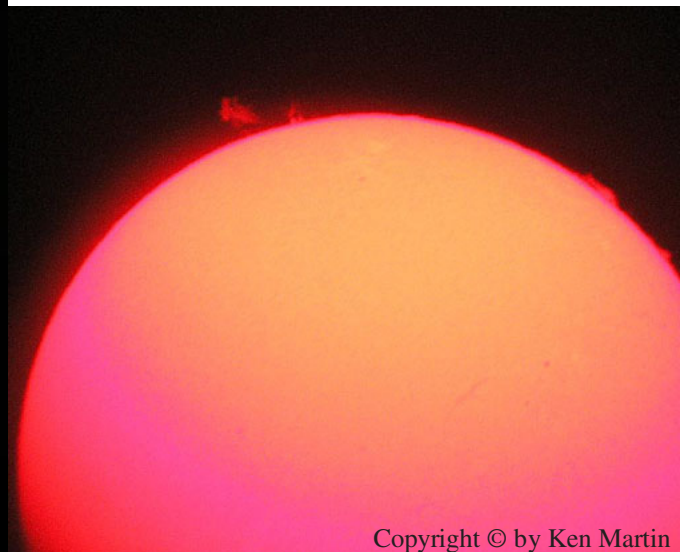
## A Couple More Great Astrophotos

On May 4th John Walley captured the near-full Moon with what he calls a “hand-held cheapo digital clicked on the eyepiece of 6" Newtonian. Very simple equipment, but can be a little effective.”

On May 12, Ken Martin did the same for the Sun. Says Ken: “While viewing the large sunspot group this afternoon, I noticed a rather prominent prominence. A simple afocal shot with a point and shoot digital camera. Rudimentary at best but fun anyway. Scope is a Lunt LS60THa. Camera is an older Olympus digital on Auto setting. A little touch up with photo deluxe.” Simple and rudimentary, perhaps, but you can’t argue with success. Keep shooting, everyone, and share your results with the rest of us.



Copyright © by John Walley



Copyright © by Ken Martin



## June 5 Venus Transit Party

On June 5th the EAS will once again join with the Science Factory to hold a star party, this time to watch the transit of Venus across the face of the Sun. The transit starts at 3:00, and ingress is one of the coolest parts, so bring your solar-filtered telescopes in time to set up well beforehand if possible. The transit lasts until sunset (8:52), so there's plenty of time to view it later if you can't get off work early.

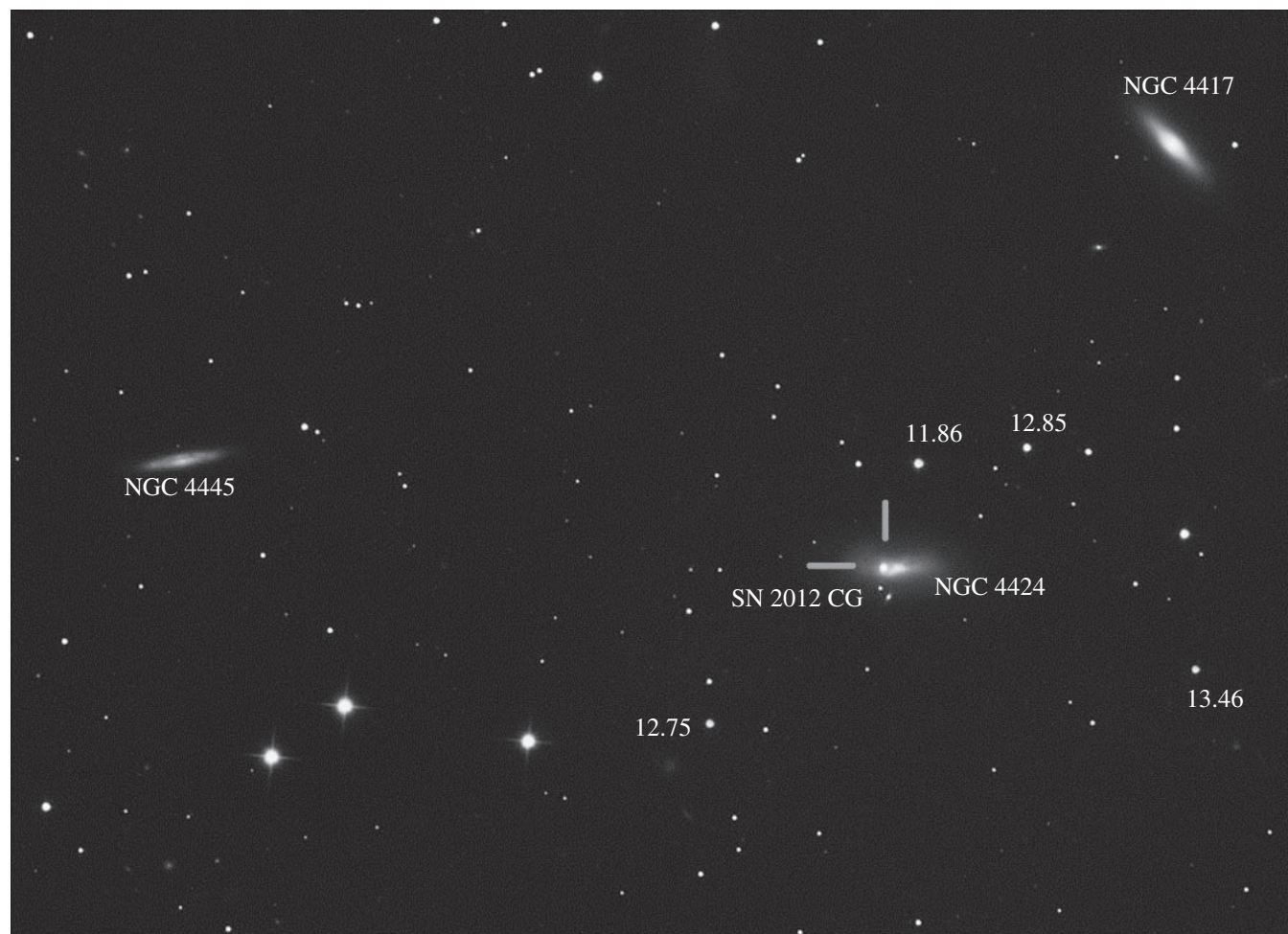
There was a pretty good crowd at the College Hill Reservoir for the partial eclipse of May 20th, so some EAS members will probably take scopes to the Reservoir during the transit, even though the official star party is at the Science Factory.

Wherever you view the transit from, don't miss it! You won't get another chance until 2117.

## Warranty Expires on Universe

Yet another supernova has exploded in a neighboring galaxy. We're seeing way more of them than usual in the last year or so. It can only mean one thing: the Universe is wearing out.

Brandt Schram managed to catch the latest blast, a supernova in NGC 4424, on the night of May 26th. It's a stack of three 2-minute exposures. It was about 13th magnitude at the time and has since gotten brighter. Current estimates put it at 11.9, well within the reach of an 8" scope under dark skies. Go have a look at the universe falling apart around us!



## Kenneth Penwell

We have just learned that longstanding EAS member Kenn Penwell died April 3 of an accidental drowning. He was 65.

Kenn was a quiet and soft-spoken member of our club, always friendly and interesting to talk with. He was a regular at our meetings and attended many Oregon Star Parties.

From his Register-Guard obituary: Kenneth Clyde Penwell was born Oct. 17, 1946, in South Gate, Calif., to Delbert and Beulah Schmitz Penwell. He married Elaine Briody on Aug. 13, 1969, in Reno, Nev.

He graduated from Sheldon High School in 1964. He worked as a truck driver for Eugene Moving & Storage from 1964 until his retirement in March 2003.

Survivors include his wife; a son, Christopher of Vancouver, Wash.; a daughter, Sarah Asplund of Carrollton, Texas; and three grandchildren.

Remembrances should be sent to Food For Lane County.

## Bill is Officially Cool

From: "Bill Murray" <bmurray47@gmail.com>

Sent: Tuesday, May 8, 2012 3:40:04 PM

Subject: Fwd: What my friend said

On Cinco de Loonie [night of the “Super Moon”], I was the only EAS member at the reservoir with a scope. After the hoopla ended and most of the 100 or more went home, a dozen or more stayed to look thru the scope at Saturn, Mars, Venus, the Moon, Stargate, etc. Towards the end of my time there, a Sikh and his friend came by. They looked thru my scope but the Sikh went off to talk to the other couple still there as they had lived in the same town. His friend (from India) and I talked about cabbages and kings and things astronomical for a good half hour, if not longer.

The next day my son, Rob, said a friend of his mentioned going to the Reservoir and talking to an “astronomer” (my quotes). I laughed and said “Rob, it was me; I was the only EAS member there with a scope!” He e-mailed the friend and here is the result:

----- Forwarded message -----

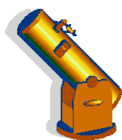
From: Robert Murray

Here is what my friend wrote about going to the reservoir on Saturday night:

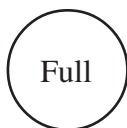
“Had a pretty awesome night with Astronomy, saw the moon, saturn, venus, and mars through a telescope. Also, had a really deep conversation with this really cool astronomer! Almost made me dizzy just thinking about the stuff we were thinking/talking about!”

Didn't know I had such an effect on a person, much less carry on a deep conversation! Or that I am Cool!!!

Bill



# Observing in June



Full



Last Q



New



1st Q

June 4	June 11	June 19	June 26
Mercury Set: 9:48 PM	Mercury Set: 10:21 PM	Mercury Set: 10:36 PM	Mercury Set: 10:34 PM
Venus Set: 8:58 PM	Venus Rise: 5:04 AM	Venus Rise: 4:28 AM	Venus Rise: 4:02 AM
Mars Set: 1:58 AM	Mars Set: 1:36 AM	Mars Set: 1:12 AM	Mars Set: 12:51 AM
Jupiter Rise: 4:43 AM	Jupiter Rise: 4:20 AM	Jupiter Rise: 3:54 AM	Jupiter Rise: 3:32 AM
Saturn Set: 3:27 AM	Saturn Set: 2:59 AM	Saturn Set: 2:27 AM	Saturn Set 1:59 AM
Uranus Rise: 2:37 AM	Uranus Rise: 2:10 AM	Uranus Rise: 1:39 AM	Uranus Rise 1:11 AM
Neptune Rise: 1:21 AM	Neptune Rise: 12:53 AM	Neptune Rise: 12:21 AM	Neptune Rise: 11:50 PM
Pluto Rise: 10:09 PM	Pluto Rise: 9:41 PM	Pluto Rise: 9:09 PM	Pluto Rise: 8:41 PM

All times: Pacific Standard Time (Nov 4, 2012-March 10, 2013) = UT -8 hours or U.S. Pacific Daylight Time (March 11-November 3, 2012) = UT -7 hours.

Date	Moonrise	Moonset	Sunrise	Sunset	Twilight Begin	Twilight End
6/1/2012	17:54	03:16	05:32	20:49	03:14	23:08
6/2/2012	19:10	03:57	05:32	20:50	03:13	23:09
6/3/2012	20:22	04:46	05:31	20:51	03:12	23:11
6/4/2012	21:26	05:44	05:31	20:51	03:11	23:12
6/5/2012	22:20	06:49	05:30	20:52	03:10	23:13
6/6/2012	23:04	08:00	05:30	20:53	03:09	23:14
6/7/2012	23:40	09:12	05:30	20:53	03:08	23:16
6/8/2012		10:23	05:30	20:54	03:07	23:17
6/9/2012	00:11	11:31	05:29	20:55	03:06	23:18
6/10/2012	00:39	12:36	05:29	20:55	03:06	23:19
6/11/2012	01:04	13:39	05:29	20:56	03:05	23:20
6/12/2012	01:29	14:40	05:29	20:56	03:05	23:21
6/13/2012	01:54	15:40	05:29	20:57	03:04	23:21
6/14/2012	02:21	16:40	05:29	20:57	03:04	23:22
6/15/2012	02:51	17:39	05:29	20:57	03:04	23:23
6/16/2012	03:25	18:36	05:29	20:58	03:04	23:23
6/17/2012	04:05	19:30	05:29	20:58	03:03	23:24
6/18/2012	04:50	20:20	05:29	20:58	03:03	23:24
6/19/2012	05:41	21:05	05:29	20:59	03:03	23:24
6/20/2012	06:37	21:45	05:29	20:59	03:04	23:25
6/21/2012	07:38	22:20	05:30	20:59	03:04	23:25
6/22/2012	08:41	22:51	05:30	20:59	03:04	23:25
6/23/2012	09:46	23:20	05:30	20:59	03:04	23:25
6/24/2012	10:53	23:48	05:30	20:59	03:05	23:25
6/25/2012	12:00		05:31	21:00	03:05	23:25
6/26/2012	13:10	00:15	05:31	21:00	03:06	23:24
6/27/2012	14:21	00:44	05:32	21:00	03:07	23:24
6/28/2012	15:34	01:15	05:32	20:59	03:07	23:24
6/29/2012	16:48	01:51	05:33	20:59	03:08	23:23
6/30/2012	18:00	02:35	05:33	20:59	03:09	23:23

All times are for Eugene, Oregon, Latitude 44° 3' Longitude 123° 06' for listed date

## Items of Interest This Month

6/4 Partial lunar eclipse 3:00-5:00 AM

**6/5 Transit of Venus 3:00 PM to sunset**

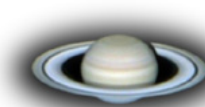
6/17 Moon, Jupiter, Venus, and Pleiades near one another at dawn

6/20 Summer solstice

6/20-26 Best time to see Mercury just after sunset

6/27 Peak of Boötid meteors early AM

**6/29 First Quarter Friday Star Party**



## For Current Occultation Information

Visit Derek C. Breit's web site

**"BREIT IDEAS Observatory"**

<http://www.poyntsource.com/New/Regions/EAS.htm>

Go to Regional Events and click on the Eugene, Oregon section. This will take you to a current list of Lunar & asteroid events for the Eugene area. Breit continues to update and add to his site weekly if not daily. This is a site to place in your favorites list and visit often.