Issue 2008-10

IO - October 2008

Eugene Astronomical Society
Annual Club Dues $25
President: Sam Pitts - 688-7330
Secretary: Jerry Oltion - 343-4758
Additional Board members:
Jacob Strandlien, Tony Dandurand,
Tommy Lightning Bolt.

www.eugeneastro.org

EAS is a proud member of:

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

NEXT MEETING: OCTOBER 23RD
(Note that this is back to *Thursday*)

and will be held upstairs in the cafeteria above our regular meeting room

The 1979 Solar Eclipse

by John Walley

In February of 1979, Eugene was on the path of a solar eclipse that swept across North America. John Walley watched it and will show us what it was like. The next solar eclipse visible from here will be in 2017, so don't wait until then to get your eclipse fix. Come share John's experience now.

Sam Pitts may also have a short presentation on a subject to be announced, and Jacob will do his regular news presentation.

We'll briefly take care of some club business: a vote for two board of directors positions that are up for re-election, and a vote to ratify some updates to the bylaws.

We'll also have our usual information sharing between members. We always encourage audience participation during our meetings. EAS meetings are traditionally times when we learn about astronomy and share experiences and knowledge of astronomy and the night sky. If you have something to share with the group, please do so.

Come and enjoy the wonders of the night sky with the Eugene Astronomical Society. After the meeting we can gather at The North Bank for dinner and conversation.

October Events

Remember our "First Quarter Friday" on October 10th at the College Hill Reservoir, 24th and Lawrence, starting at 7:00. First Quarter Fridays are meant to be informal, fun gatherings for EAS members and the general public. Bring a telescope and have fun observing and sharing the view with whoever shows up.

We're also hosting a star party on October 11th at Mt Pisgah. This is a rescheduling of the star party that was clouded out last month.

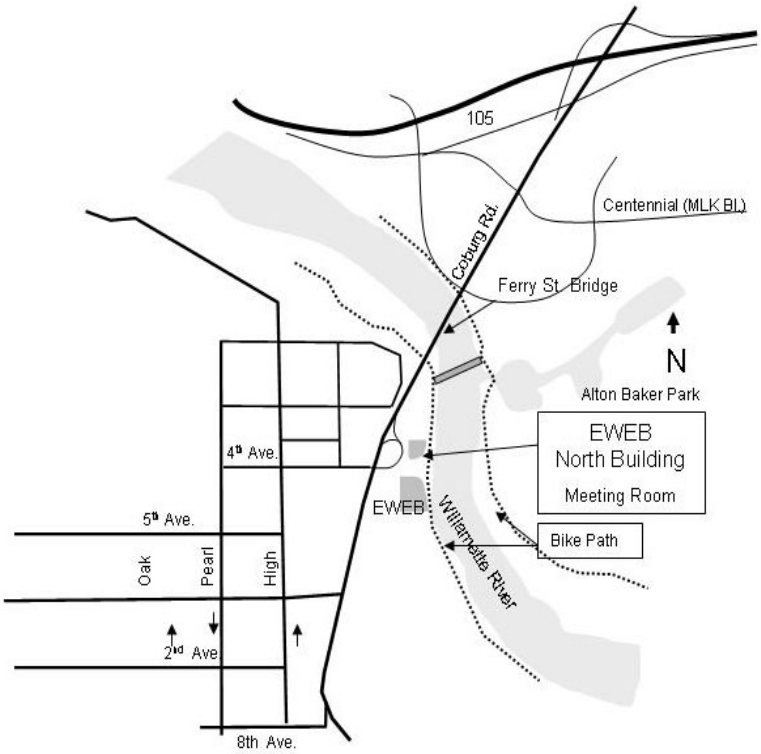
REMEMBER THAT WE NOW MEET AT EWEB

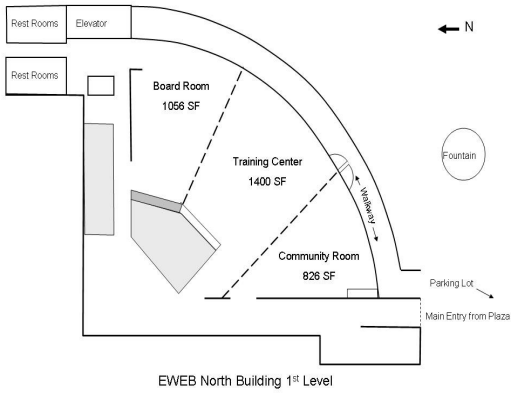
500 E. 4th Avenue in Eugene.

OUR NEXT MEETING WILL BE ON THURSDAY, OCTOBER 23rd AT 7:00 IN THE NORTH BUILDING'S CAFETERIA, ON THE 2ND FLOOR. This is in the semicircular building to the north of the fountain at EWEB's main campus on the east end of 4th Avenue, same as always, but on the 2nd floor this time.

Meeting dates and times for the rest of the year:
October 23 (Thursday) in Community Room
November 10 (**Monday**) in Community Room
December 18 (Thursday) in Community Room

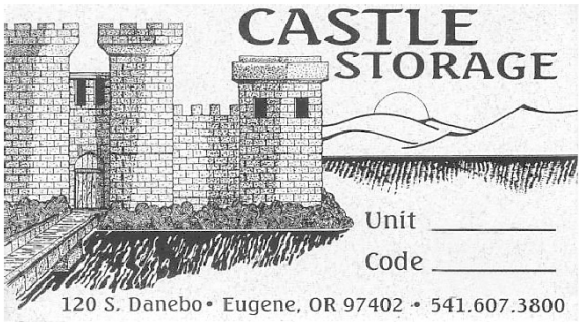
Join the EAS mail list at http://eugeneastro.org/mailman/listinfo/org.eugeneastro.general





EWEB North Building 1st Level

EWEB is located at 500 E. 4th Avenue. Our meetings will be in the first room in the semicircular building to the north of the fountain.



Thank You Castle Storage

Board member Tommy Lightning Bolt was instrumental in getting a storage unit from the owners of Castle Storage for EAS 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 units.

Observing in October

1st Q Full Last Q New

October 7	October 14	October 21	October 28
Mercury Rise: 7:14 AM	Mercury Rise: 6:14 AM	Mercury Rise: 5:57 AM	Mercury Rise: 6:14 AM
Venus Set: 7:54 PM	Venus Set: 7:49 PM	Venus Set: 7:46 PM	Venus Set: 7:47 PM
Mars Set: 7:21 PM	Mars Set: 7:05 PM	Mars Set 6:49 PM	Mars Set: 6:34 PM
Jupiter Set: 11:30 PM	Jupiter Set: 11:06 PM	Jupiter Set: 10:42 PM	Jupiter Set: 10:19 PM
Saturn Rise: 4:46 AM	Saturn Rise: 4:23 AM	Saturn Rise: 3:59 AM	Saturn Rise: 3:36 AM
Uranus Set: 5:14 AM	Uranus Set: 4:45 AM	Uranus Set: 4:16 AM	Uranus Set: 3:48 AM
Neptune Set: 2:48 AM	Neptune Set: 2:20 AM	Neptune Set: 1:52 AM	Neptune Set: 1:24 AM
Pluto Set: 10:50 PM	Pluto Set: 10:22 PM	Pluto Set: 9:55 PM	Pluto Set: 9:28 PM

All times: Pacific Standard Time (Nov 4, 2007-March 9, 2008) = UT -8 hours or U.S. Pacific Daylight Time (March 9-November 2, 2008) = UT -7 hours.

Date	Moonrise	Moonset	Sunrise	Sunset	Twilight Begin	Twilight End
10/1/2008	09:55	19:33	07:11	18:52	05:35	20:28
10/2/2008	11:02	21:03	07:12	18:50	05:36	20:26
10/3/2008	12:06	20:39	07:13	18:48	05:37	20:24
10/4/2008	13:06	21:23	07:14	18:47	05:38	20:22
10/5/2008	13:59	22:15	07:16	18:45	05:40	20:20
10/6/2008	14:43	23:14	07:17	18:43	05:41	20:19
10/7/2008	15:20	——	07:18	18:41	05:42	20:17
10/8/2008	15:51	00:18	07:19	18:39	05:43	20:15
10/9/2008	16:16	01:25	07:21	18:38	05:45	20:13
10/10/2008	16:39	02:33	07:22	18:36	05:46	20:12
10/11/2008	17:00	03:43	07:23	18:34	05:47	20:10
10/12/2008	17:21	04:54	07:24	18:32	05:48	20:08
10/13/2008	17:42	06:07	07:25	18:31	05:49	20:07
10/14/2008	18:06	07:24	07:27	18:29	05:51	20:05
10/15/2008	18:36	08:43	07:28	18:27	05:52	20:03
10/16/2008	19:13	10:04	07:29	18:26	05:53	20:02
10/17/2008	20:01	11:24	07:31	18:24	05:54	20:00
10/18/2008	21:01	12:36	07:32	18:22	05:55	19:59
10/19/2008	22:11	13:37	07:33	18:21	05:56	19:57
10/20/2008	23:27	14:23	07:34	18:19	05:58	19:56
10/21/2008	——	14:59	07:36	18:18	05:59	19:54
10/22/2008	00:44	15:28	07:37	18:16	06:00	19:53
10/23/2008	01:58	15:51	07:38	18:14	06:01	19:51
10/24/2008	03:10	16:12	07:39	18:13	06:02	19:50
10/25/2008	04:18	16:31	07:41	18:11	06:03	19:49
10/26/2008	05:27	16:51	07:42	18:10	06:05	19:47
10/27/2008	06:33	17:12	07:43	18:08	06:06	19:46
10/28/2008	07:41	17:36	07:45	18:07	06:07	19:45
10/29/2008	08:48	18:04	07:46	18:06	06:08	19:43
10/30/2008	09:53	18:37	07:47	18:04	06:09	19:42
10/31/2008	10:55	19:19	07:49	18:03	06:10	19:41

Courtesy Sam Pitts

All times are for Eugene, Oregon Latitude 44º 3' 8" Longitude 123º 5' 8" for listed date

Other Items of Interest This Month

Good month for finding Vesta in Cetus
Venus visible in west after sunset
M31 (Andromeda Galaxy) is high this month
10/1 Moon 5° south of Venus
10/8 Io shadow transit on Jupiter (6:05-9:38pm)
10/10 First Quarter Friday star party
10/11 Mt. Pisgah star party
10/15-10/30 Mercury visible in east before sunrise

For Current Occultation Information

Visit Derek C. Breit's web site

"BREIT IDEAS Observatory"

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

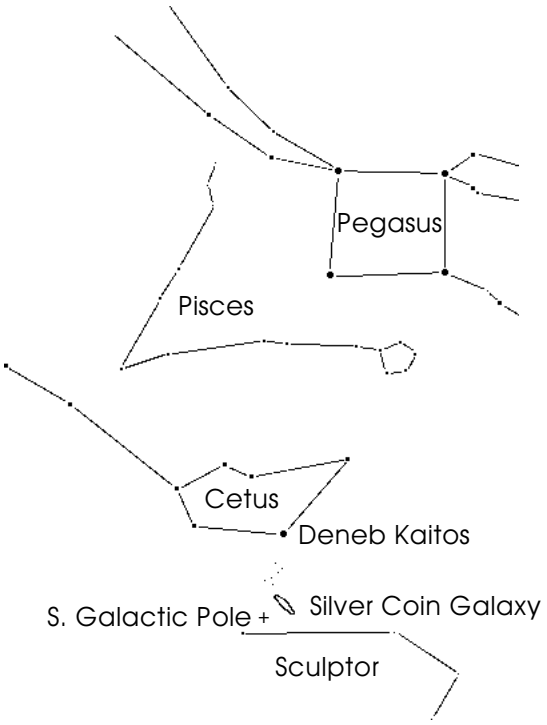
Go to Regional Events and click on the Eugene, Oregon section. This will take you to a current list of Lunar & asteroid events for the Eugene area. Breit continues to update and add to his site weekly if not daily. This is a site to place in your favorites list and visit often.

Observing Highlight: The Silver Coin Galaxy

(Editor's note: This is the first in what I hope to be a series of articles — one each month — about interesting objects to look for. I'm hoping to find things that most of us don't already know, but that can be found fairly easily in a modest telescope. If you've got a favorite candidate you'd like to share in this space, let me know!)

Autumn is a great time to look for the Silver Coin Galaxy, one of the largest galaxies you may never have heard about. For observers at our latitude it's quite a ways south, but this time of year it rises 21° above the horizon, nearly the same height that the Lagoon Nebula in Sagittarius reaches in summer. And it's definitely worth a look. It's a big target: at 27.5 x 6.8 arc-minutes it's nearly as wide as the full Moon, and it glows at 7th magnitude, so it's prominent even in binoculars. A 6-inch or larger telescope will reveal some of the mottled dust lanes. It's often considered second only to the Andromeda Galaxy in beauty.

The Silver Coin, also known as NGC 253, lies on the northern edge of Sculptor, and is the central galaxy of the Sculptor Cluster, one of the closest galaxy clusters to the Local Group in which the Milky Way resides. The best estimate of its distance puts it at 11.4 million light-years away.



NGC 253, the Silver Coin Galaxy. North is up. Photo © by Sam Pitts.

To find the Silver Coin Galaxy, draw a line straight south along the eastern side of the great square of Pegasus and go 2.5 times the height of the square until you reach Deneb Kaitos, the bright star at the bottom of Cetus, the whale. Go 7° (about four finger-widths) south of that. You'll pass a distinct triangle of 5th-magnitude stars halfway there, and another more ragged triangle below that. The Silver Coin galaxy will be just below and to the right of the second triangle.

Caroline Herschel discovered the Silver Coin Galaxy in 1783 while searching for comets. There's a small globular cluster, NCG 288, about 1.5° SE of it, and the south galactic pole is about 2° to the SSE.

Right ascension = 00h47m33s. Declination = -25°17m18s

Albert Einstein's Telescope Discovered

Compiled from various sources

Albert Einstein's long-lost telescope, forgotten for decades in a Jerusalem storage shed, goes on display this week after three years and $10,000 spent restoring the relic.

The legendary physicist received the telescope in 1954, the year before he died, as a gift from a friend he met at Princeton University named Zvi Gizeri, who probably made it himself, said officials at the Hebrew University in Jerusalem where the scope is on display

Einstein, who was a co-founder of the Hebrew University, willed his records to the school. There were rumors through the years that he also left a telescope, but it took modern sleuthing and some luck to find it.

The scope is an 8-inch f/8 Newtonian reflector on a base experts say may have been taken from the German army. It was this unique base, recognizable in a picture of Einstein with the telescope, and a signature from Gizeri on one of its mirrors, that confirmed its authenticity in 2004, when a biologist named Eshel Ophir made the connection.

Albert Einstein's telescope

The forgotten telescope was first discovered in a storage shed in the late 1990s by a computer specialist at the Hebrew University. But he did not recognize it as Einstein's, and left it in the shed.

Ophir made the connection by accident, initially mistaking another forgotten telescope for the famous physicist's. After searching through the archives and photos, Ophir realized the real Einstein telescope was actually the one his colleague had found unceremoniously years earlier.

Ophir said he immediately took the telescope to the university's Meyerhoff Youth Center, where he was serving as director, to protect and clean it.

With the exception of a new eyepiece, the rest of the device is original.

It is unlikely that a theoretician like Einstein, who won a Nobel Prize in 1921 for his theory of relativity, would have had much use for a telescope in his work. "I don't think anybody investigated Einstein's star-gazing habits," said Dvora Lang, the current director of the Meyerhoff Youth Center. "But it was for his pleasure, not for his work."

The newly unveiled telescope will not be housed with the rest of Einstein's documents at the Jewish National and University Library, but will remain in the Meyerhoff Center for use by students.

Lang said she hoped by looking into the telescope of one of the greatest scientists of the 20th century, a new generation of Israeli children would be inspired to learn more about science.

"This is setting them on fire," she said.

Einstein will be getting a new telescope in a few years: there's a gravity wave detector project in Europe, still in the design phase at the moment, that's called the "Einstein telescope" in homage to Einstein's work on relativity, which predicted the gravity waves that the new detector will be searching for.

Dues are Due!

EAS membership runs from October thru September. That means it's time to pay your club dues again. If you didn't pay at the September 30th meeting, please mail your dues to the Eugene Astronomical Society, PO Box 7264, Eugene, OR 97401. Dues are $25. Make your checks payable to Eugene Astronomical Society, or just EAS if your pen is low on ink.

Concert of the Cosmos Saturday, October 4

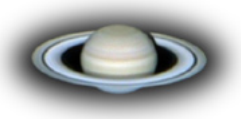
The EAS is co-sponsoring (along with the Eugene chapter of the American Guild of Organists and Central Presbyterian Church) a pipe-organ concert featuring music on astronomical themes. Several EAS members have assisted in the production of a slide show to accompany the music. The performance should be a visual and auditory extravaganza stretching from Earth to the edge of the Universe. Those of us involved in the project have been calling it "The Universe in G-Whiz Major." Come see what we've done! The concert is free.

Where: Central Presbyterian Church, 15th and Patterson in Eugene.

When: 8:00 pm on Saturday, October 4, 2008

Discounted Magazine Subcriptions

One of the benefits of EAS membership is a club discount on subscriptions to *Sky & Telescope* and *Astronomy* magazines. The clubmember rate for *Sky & Telescope* Magazine is $32.95 for one year or $65.95 for two years. The clubmember rate for *Astronomy* magazine is $34 for one year or $60 for two years. This is the rate for new subscriptions or renewals. New subscriptions have to go through the club secretary (Jerry Oltion) to qualify for the discounted rate, so contact Jerry if you want to start a new subscription. *Sky & Telescope* allows you to renew at the club rate on your own, but *Astronomy* requires renewals to go through the club secretary as well. For more information, contact Jerry at j.oltion@ sff.net or 343-4758.



Telescope Lending Library

The EAS has several telescopes available for members to borrow. The beautiful 10-inch truss-tube dobsonian that Tony Dandurand built this spring is once again available, and we have several others ranging from 8-inch to 12-inch in our storage unit. If you need a scope, or if you just want to try something different for a while, the club has scopes available.

Contact Jerry Oltion (343-4758) or Sam Pitts (688-7330) to arrange to borrow one of the club's scopes.