

# IO - October 2002

**Eugene Astronomical Society**, Annual Club Dues \$25. President and IO editor, Barb Shaw 344-9956, [barbshaw@earthlink.net](mailto:barbshaw@earthlink.net). VP/Program Chair: Rick Kang 683-1381 [rkang@efn.org](mailto:rkang@efn.org) Treasurer and School Star Party Coordinator, Sue Moe [suemoe@worldnet.att.net](mailto:suemoe@worldnet.att.net). Telescope lending program, Jean Grendler 683-9382, [jmgrendler@qwest.net](mailto:jmgrendler@qwest.net)\* Website: <http://www.eugeneastro.org>

*\*Io (EYE-oh) is nearest to Jupiter and fastest orbiting of the four "Galilean" moons.*

## OCTOBER MEETING

This month, we get together Monday evening, October 7. We start at 6:30 pm with space videos and socializing. The official meeting runs 7:00 to 9:00 pm.

Meetings are the first Monday of the month, at North Eugene High School, Room 319 at the rear of the campus. From River Road, one block south of Beltline, turn west on Silver Lane. Go one long block and turn left into the high school's east parking lot. Park near the back of the lot.

Members will give short illustrated talks on various fall constellations and deep sky objects of interest to telescope observers, including galaxies M32, M33, nebulae and star clusters including the Pleiades.

## WEBSITES TO CHECK

The Anglo-Australian Observatory near Warrumbungles, has posted a superb collection of wide field telescope images, mostly southern hemisphere. See their 50 favorite at <http://www.aao.gov.au/images/general/favourites.html>

Data on star is available on a website set up by Jean-Claude Mermilliad. Follow the system of star numbers and look up any star out there.

[http://obswww.unige.ch/webda/cgi-bin/sel\\_by\\_no.cgi?mel022](http://obswww.unige.ch/webda/cgi-bin/sel_by_no.cgi?mel022)

For astrophotography, find a rich mine of resources, linked to B&H Cameras.

[http://www.astropix.com/HTML/I\\_ASTROP/FOCUS/FOCUS17.HTM](http://www.astropix.com/HTML/I_ASTROP/FOCUS/FOCUS17.HTM)

Interested in a female view of astronomy? See

<http://www.astras-stargate.com/index.htm>

## UPCOMING EVENTS

October 5 – Pine Mountain Observatory volunteers celebration and final star party of the year for those who have helped out. Contact Greg Hogue – 541-312-7280.

October 5 - Star Party at the Goldendale Observatory, in south central Washington. Camping at Brooks Memorial Park north of Goldendale. Contact Karl Schroeder [kschroe225@aol.com](mailto:kschroe225@aol.com)

October 10 - Bethel Area Schools Star Party, a Thursday with no school the next day. Contact Sue Moe, School Star Party Coordinator 683-9382 or [moe\\_s@4j.lane.edu](mailto:moe_s@4j.lane.edu)

October 18 – 6:30- 9:30, Star Party at Oaklea Middle School in Junction City. EAS needs members with scopes to help at this event. Contact Sue Moe to volunteer and for more information. 683-9382 or [moe\\_s@4j.lane.edu](mailto:moe_s@4j.lane.edu)

October 25-26 –7:00 pm, Yucca Valley Community Center, north of Los Angeles. The Starry Nights Festival. Speakers include comet hunter David Levy. (760) 369-7211 for more information.

October until it closes – in New York. Brooklyn Academy of Music presents Philip Glass's opera Galileo Galilei, about an Italian scholar who aimed a telescope skyward in 1609 and got in big trouble.

## EUGENE STAR PARTY

Thanks to all who brought scopes or otherwise came out to help and enjoy Friday night's EAS star party at College Hill Reservoir on September 13. Dave estimates about 500 guests attended. Larry Deckman, of Star Finders, Inc. did a fantastic job as guest speaker. Our club booth was staffed by Anny Cole, thank you for distributing all the sample Astronomy Magazines, donated by the publisher, and for helping with donations and club information. We may have several new members. Celebrities in attendance included "Commadore Steppenwolf, a local radio personality who has worked hard at getting area disc jockeys to promote our star parties.

We truly had a "field of telescopes" for viewing. Many new scope owners were helped by EAS members. Lots of teachers attended, some bringing students receiving extra credit for attending. Teachers would follow up with requests for classroom presenters.

Good job, volunteers.

## CROW STAR PARTY

On Friday, September 20, three club members went to Crow-Applegate Elementary School to help teacher Rod Cooper show the stars to students and family members. Jeff Phillips estimated the crowd at around forty students and twenty parents, a good turn out for a community the size of Crow.

Frank S. brought his own 12" scope, Jeff brought the club 12", and Richard Boyd brought binoculars. Thanks to Frank checking out Heavens-Above, all the kids got to watch an unusually bright Iridium flare, and people had a chance to look at the full moon featuring the rays of Tycho. We also looked at M13, M31, Alcor and Mizar, the double cluster in Perseus, and others.

The students were well prepared; they asked very good questions during an introductory talk, and many of them made sketches of what they observed at the eyepiece.

All in all, a very successful event, and Jeff encouraged Mr. Cooper to think about doing another event in the spring when Jupiter and Saturn are up, or next fall when Mars will be visible.

## AURORA TOURISM OPTION

The Churchill Northern Studies Centre, a non-profit, independent research institute along the western coast of Hudson Bay, in Canada, is hosting a five-day Northern Lights and Astronomy non-credit course March 6-11, 2003. Cost is \$1,000 Canadian, about \$650. All proceeds go directly to supporting ecological research in the Canadian arctic.

Get to Churchill by plane or train, a town famous for polar bears. Dozens gather on the shore and people see them up close and photograph them from large tractor vehicles.

For more information on this course see [www.cancom.net/~cnsc](http://www.cancom.net/~cnsc). Contact Kelsey Eliasson, Program Coordinator, at 204-675-2307 or at [cnsc@cancom.net](mailto:cnsc@cancom.net)

## LASER POINTERS AVAILABLE

Anyone yearning to possess a green laser beam pointer might want to check choices at <http://z-bolt.com/generic27.html> These are perfect for pointing out constellations and planets at star parties and a great astronomy teaching tool. To take advantage of a special offer on now, prices starting at \$139, call Dave Wyland at Beam of Light Technologies, 877 – 801- 9299.

## SUE MOE'S RESEARCH

North Eugene High School science teacher Sue Moe participated in an astronomy research project with Dr. Thomas Olsen, at Lewis and Clark College during the summer.

They studied 44 i Bootes, a short period eclipsing variable star near the end star in the handle of the Big Dipper. Its period is about 6.43 hours, so it has an observable eclipse almost every night, and it stays viewable all night because it is circumpolar.

The period seems to be getting shorter, which might be evidence of mass exchange between the stars. It is a contact binary, separated by about 3x the distance between the Earth and Moon, both stars like our Sun in color and type. The two of them are almost the same size as well, and there is also a distant third star in the system.

The system is of great interest to astronomers. Taking data on 44i Bootes is big. Scientists using the Chandra X-ray Telescope spent 59, 000 seconds imaging it.

It was studied at Lewis & Clark by James Karl between 1955 and 1975. His data was revived from magnetic tapes in the 80' s and sent to a researcher studying 44i Bootes. In 1996 Colby Jurgenson and Matt Price collected additional data points. This revived the interest at L&C, so a team headed by Thomas Olsen, started to research the star again.

Olsen obtained a Murdock grant supporting two summers of research for Olsen and a teacher. L &C added a grant for a student or two to join the team.

The first summer, the weather was uncooperative and they only had a few cloudless nights. Using the photomultiplier required the use of dry ice for cooling, and work was complicated by an electrical short that burned out the telescope drive. The following summer they used an 11" go- to telescope and a CCD camera for a lot more results.

Moe applied with Olsen for another Murdock grant. This past summer she worked mostly with two L&C students, Alexa Amos and Joe Koop. Alexa graduated last spring and Joe is a junior. The students got the best data of the summer on the night and morning of both their birthdays.

A new 12" Meade LX200 was purchased that summer, and used with the CCD camera. The bugs still have to be worked out, as the data seems to be mostly noisier than they would like. Sue hopes that her work next summer will yield more and better data.

## KIDS' ACTIVITY BOOK PUBLISHED

As an amateur astronomer of many years Kye Ewing saw how astronomy grabs the interest of young people. Yet most parents are more concerned that their children concentrate on more practical things like mathematics.

To make use of a natural interest, Ewing composed an activity book called "Exploring Fractions with Astronomy," which she is self publishing. Included are pages of practice problems, with answers that solve dot-to-dot puzzles to form constellations. She's invented astronomy games and observation activities like "Percent of Illuminated Moon."

The book is only available through her site <http://www.kyes-world.com>

## HALLOWEEN STAR GAZING

When weather permits, Halloween is a good time to share your astronomy hobby with children and your neighbors. Set up a telescope on the driveway near the street and show the sky to the trick-or-treaters and their escorts as they pass by.

Don't expect to have their attention for more than a few minutes at a time. Looking through a telescope is not the reason that they are on the street! Fill your pockets with treats and hand out candy as they continue on their way.

Pick bright and easily seen objects to view through the telescope. Since the moon is in last quarter this year, you might start with either M13 or Albireo. Then, maybe move on to M31 later in the evening. Read up on whatever objects you plan on observing so that you can answer the inevitable questions.

As at most star parties open to the public, it is a good idea to protect your scope. A dew-shield can keep little fingers away from a refractor objective or SC corrector plate. Don't use your best eyepieces. There is a good chance that small sticky fingers will be trying to grab a better view. Safety is important so dress any power cord so that it will not be stepped on or tripped over.

Since your visitors will come in a wide range of sizes, have boxes or step ladders ready to allow viewing by short 3-foot ghosts or 6-foot escorts. Parents will be delighted that you are providing an educational experience for their children. A view through a good telescope will usually knock their socks off.

This is supposed to be fun for you too. If guests are too unruly - just shut down. I have never had anything but good experiences passing out eye candy on Halloween, and you probably will too.

Sig Peterson

## MT. PISGAH STAR PARTY

Saturday evening, September 29, about 80 showed up to hear Sue Moe's introductory talk and then viewed the sky from the dampened gravel road with its big sky. Barb Shaw gave a short talk about EAS and what we do then handed out star charts and information about our club to those interested.

Frank Sz. wowed us all at the outside by pointing out that the bright object moving east was the International Space Station. He set up his impressive 17" scope and soon long lines formed to climb the ladder for excellent views of the Ring, M13 and many others.

Despite moving bands of high clouds, Sue, Barb, Jeff Phillips, Rick Collins, Fred Austin and Alan Gillespie also found plenty to entertain the kids and adults who turned out. Arboretum program director Chandra says the event generated much needed funds and was such a success she hopes we can do it again in 2003.

Says Frank, "Mt. Pisgah is a great place for a star party. We should do one every month out there next summer. Oh, the UFO chasing the space shuttle across the sky that night was Progress 9, an unmanned Russian supply ship that was supposed to dock September 1."