# IO - November 2002

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

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

#### **NOVEMBER MEETING**

For our next meeting we get together Monday evening, November 4. The meeting runs 7:00 to 9:00 PM. Meetings are the first Monday of each month, at North Eugene High School, Room 319 at the rear of the campus. From River Road, go one block south of Beltline, and 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 and enter at the rear.

The November meeting will include nominations for officers. In December we will have elections. The program for both November and December meetings will focus on telescopes. (See following story.)

### TELESCOPE FAIR

At the November and December meetings, we will explore the pros and cons of all types of telescopes. At the November meeting we cover the basics -- jargon, reflector vs. refractor, "alt-az" vs. equatorial mounts, manual vs. go-to pointing, price range of various styles.

We will have telescopes on exhibit, displays by sellers, and catalogs. A panel of experts will talk then answer questions. Members will bring scopes to demonstrate and talk about.

If you already have a scope, come to learn about nearby dark sky viewing sites and items that might make your hobby more rewarding. If you are a beginner and want help and advice selecting a telescope for yourself or as a gift to someone special this holiday season, the November meeting is where you want to be. Club members will offer assistance. Make a list of what you want to know or come and just listen to others.

At the December meeting we continue the theme and address some of the more advanced topics including an in-depth look at eyepieces and possibly Dave Cole's presentation of a current go-to model telescope, a marriage of telescope and computer. And we'll still have plenty for the novice. Meeting cost is one dollar for non-members, students at no charge.

Contact Rick, Sue or Alan for if you'd like to bring a telescope or other exhibit or display and for information.

Please contact Rick Kang, EAS VP for programs with your ideas and if you'd like to put on a future

program.

#### **NEW CLUB OFFICERS**

At the November meeting, EAS members will be given nomination forms. We will have ballots at the December meeting.

Not a whole lot of time needed but we do have fun making things happen. All these jobs are essential for our club to function, and we need good people like you. Please throw your hat into the ring!

#### LEONID METEOR SHOWER

The Leonid Meteor Shower and predicted storms are due in November. Last year the show was spectacular and there is a chance of an equal display this year. Of course, we never know for sure.

he first peak is at about 8:00 PM, Pacific Standard Time the evening of November 18. A second peak should occur about 2:40 AM the morning of November 19. Because this is the night of the full moon, try to get in the shadow of a hill. You don't need any optical aid to see meteors, just clear and dark skies. Pine Mountain will NOT be open, but telescopes are not needed anyway.

#### UPCOMING EVENTS

November 8-9, Willamette University in Salem. Imaging the Sky 2002 Conference. Details at: <a href="http://home.teleport.com/~argo/its2002/its2002.html">http://home.teleport.com/~argo/its2002/its2002.html</a>

November 18-19 Leonid Meteor Shower. (See later story.)

December 1, before dawn in the eastern sky, look for a stunning conjunction of the crescent moon with Venus and Mars very nearby.

December 6, Thurston Elementary School, Springfield, Regional School and Public Star Party, weather permitting.

December 13, Oaklea Middle School, Junction City. Come to the make up event for missed star party in October. Let's hope for clear skies this time

December 14, 11:00 AM, UO Campus. FOPMO Winter Board Meeting on the fourth floor of Willamette Hall in Eugene. For agenda items and information contact President Mary Hill: <a href="mailto:visions@pacifier.com">visions@pacifier.com</a>.

Contact Sue Moe for any school star party details and information. 683-9382 moegren@msn.com

## **GALILEO NEWS**

The Jupiter probe, the robotic spacecraft Galileo, between October 28 and November 7 flies within 100 miles of the unusual moon, Almathea, which gives off more heat than it receives. Galileo will have close flybys of Jupiter's volcanic moon Io in October and November. As it passes, it will take high-resolution images of Io's surface, and possibly sample the plume of an erupting volcano.

"Io is the most volcanically active body in the solar system," says David Senske, a science coordinator for Galileo at NASA' s Jet Propulsion Laboratory. "It is just popping off left and right."

Mission controllers hope to maneuver the spacecraft near a volcano as it erupts -- a difficult task since volcanic activity on Io changes rapidly.

The spacecraft passed Io at an altitude of 610 kilometers (378 miles) on October 10, and will pass at about 300 kilometers (186 miles) on November 26. Io's volcanoes can spew sulfur dioxide and other materials several hundred miles above the surface.

The craft has been orbiting Jupiter. For two years starting in December 1997 it conducted an "extended mission" focused largely on the icy moon Europa. Galileo has filled its mission objectives and is running low on maneuvering fuel, so NASA plans to crash the spacecraft into Jupiter during 2003.

#### ICE PLANET FOUND

Out beyond Pluto, Hubble Space Telescope astronomers have found a distant object with the volume of all the asteroids combined. Unlike the long-contested 'Planet X', this candidate is one of a myriad of exotic, comet-like worlds otherwise known as 'Kuiper Belt Objects', or KBOs.

Approximately half the size of Pluto, the icy world 2002 LM60, dubbed "Quaoar" (pronounced kwa-whar) by its discoverers, is the farthest object in the solar system ever to be resolved by a telescope. See full story at:

 $\underline{\text{http://www.astrobio.net/news/modules.php?op=modload\&name=News\&file=article\&sid=289\&mode=thread\&order=0\&thold=0}$ 

## PMO REPORT

Pine Mountain Observatory is now closed for the winter. It reopens Memorial Day weekend next spring. Thanks to the following EAS members for

participating as Tour-Guides this past summer: Jim Bottorff, Frank Casebolt, Fred Domineack, Alan and Fran and Cims Gillespie, Paul Jacobsen, Randy Johnson, Rick Kang, Bob McGown, Anne O' Connell, Jeff Phillips, Barb Shaw, Tracy Stephensen, and Frank Szczepanski.

Tour Chair Greg Hogue is trying to schedule monthly dark moon "freeze your buns off" winter sessions for tour guides. Contact Greg if you' d like to participateghogue@bendcable.com.

#### WEBSITES TO CHECK

Want to block out some light pollution for in-town observing? Check out the stand-up screen panels made by these folks. <a href="https://www.DarkSkyStuff.com">www.DarkSkyStuff.com</a>

Here's an astronomy site by two clever young brothers In Britain. http://www.acseal.freeserve.co.uk

#### **EQUIPMENT EXCHANGE**

John Siple (541-758-8326) offers a 13.1 inch, f/4.5, 1992 Coulter light-weight Dobsonian scope with excellent sharp optics and a telrad. Has good bearings and perfect balance. Base and red tube fit in a station wagon. Includes 27 mm eyepiece, all for \$590.

Siple seeks in trade or to buy: Gailand occulars (4, 7, 10.5 mm). Also seeks University Optics professional series orthos in 4, 6.8, 10.2 and 28 mm. And wants a TASCO 1960S Model 20TE 4" Observatory refractor with pier, 2 finders, equatorial mount with drive, 108mm objective. Will pay up to \$1800. Also wants to buy any Clave' eyepieces.

#### GREEN LASER POINTER

Now you can buy a GREEN laser pointer, twenty times brighter than a red laser pointer. Observers can see the green laser beam in a dark sky and use it to point out stars. It is great for teaching about the sky.

Lasers of any type are very useful to collimate, or line up the optics, of any telescope. The club has a red laser collimator available to borrow and it throws a powerful beam.

For details on the new green one, prices and to order see: http://www.betapointer.com

### E-MAIL or SNAIL MAIL?

As a recipient of Io by e-mail, we want you to know that if you would prefer to have the newsletter mailed to you, all you have to do is let us know. The paper version is, by necessity, shorter as we don't have unlimited space for stories.

To contact editor Barb Shaw about this or to offer a story or idea for IO just reply to this mailing, or send a note to barbshaw@earthlink.net