

Penobscot Valley Star Gazers

An Astronomical Society of Central Maine

<http://www.gazers.org>

May 2008

Criterion for the Election

The next meeting of the PVSG will be on Monday, May 12, 2008 at 6:30 p.m. in room 310 at John Bapst Memorial High School. This month Wade will bring in his Criterion Newtonian telescope and we will have a chance to give and/or hear advice about cleaning and repairing it. Other entertainment will be provided by the club elections.

Thanks for last month's program go to Dave for bringing the Night Sky Network's outreach toolkit "Telescopes: Eyes on the Universe" up close and in focus.

Telescope Topics

April 8, 2008



April 2008

The April meeting started at 6:38 PM with 12 members present. Wade opened the meeting and immediately turned it over to Dave. Dave's talk was about the newest Toolkit from the Deep Sky Network - "Telescopes Eyes on the Universe." Dave reported that he had problems with the DVD that was supplied in the Toolkit, received a replacement DVD for the Toolkit and also had trouble with that one. A file or two would not copy properly. The newest Deep Sky Network Toolkit came with a copy of *Mercury* magazine, 2 posters, and 4 activities to help teach this lesson. There were more copies of the activities and other information on the DVD. The lesson begins with "Telescopes from the Ground Up." It first want to know what power is your telescope. By Power they meant aperture not magnification. It begins by asking if you can see the flag the astronauts left on the

Election Time



May elections are here. This year we will vote for a secretary, a treasurer, and a member-at-large. If you want to be on the ballot, tell the official coordinator, Carolyn.

moon. It goes on to explain you can not see the flag because you do not have enough aperture to resolve something that small that far away, and as one of our members pointed out you would not see something that is 3' x 5'. You would be looking down, or up if you wish, at a flag stuck

in the moon surface so we would see the flag on edge.

The activities in the toolkit revolve around how a telescope works. There is a field of view card with little punch outs to show you how small the field of view is with different eyepieces, and how big the full moon appears. These cards with punched holes are meant to be held at arm's length up to the night sky. The

lessons also tell us that what we can see through a telescope with the human eye is not the same as what can be seen with a ccd camera over a period of time or by stacking exposures. Dave went on to explain that much of what we see at night is in shades of grey. Why images are often upside down, (try taking a spoon and looking at your reflection in a spoon and then rotate the spoon 180°), or why images are reversed left to right. Our eyes are only sensitive to a very small portion of the electromagnetic spectrum. There were pictures of the same images taken in visible light, ultra violet, and infrared. There are also demonstrations on how light spreads out over distance. There is talk about resolution. A person can see small holes in paper close up but as the distance increases even the use of a telescope does not allow one to resolve or see the same holes from a distance. It said that the larger the aperture the more magnification that can be used.

On the Schedule

(Items Subject to Change)

PROGRAMS

June: Peter Lord, Night Sky Survey of Mt. Desert Island
?Summer: Dave, *Just Six Numbers*
?Summer: Alan, Australian Odyssey

STAR PARTIES

?May 31(co): Brooks

First date is primary, second is rain date; ? Tentative; (rs) rain or shine; (co) clear only

Dave's presentation ended and we then went to the business portion of our meeting.

The secretary's report was accepted as written. I wish to thank Ralph for taking the notes and writing them up for me at the March meeting. Bill's treasury report was accepted. The membership voted to become part of the Astronomical League. Wade asked for a volunteer to act as our liaison person with the League. That person will report to the League about what this club is doing. We will pay dues to the League and it is hoped the club sees lower insurance rates in the future. There was a report by Wade and Alan about the Telescope clinic we held at the University of Maine. The best guess is that about 10 people showed up with most seeming to be novices. There were parents with their children and we were able to hand out star charts. There was a report on our participation at the Challenger Learning Center during the lunar eclipse. Doug volunteered to be an additional reporter for our club with the Deep Sky Network. The other two reporters to the Deep Sky network are Wade and Dave. Our web site at www.gazers.org now has some of our past newsletters. Thanks to Ralph and Alan. Wade reported that there is much information on how to take pictures of a lunar eclipse at www.mreclipse.com.

Observing notes - Bill reported that he has bought a Sony A100 DSLR camera and is anxious to try it out. One of its features is the ability to do long time exposures. Since he has received the camera he has not had a good night to try it out. Hopefully by the next meeting he will be able to report more.

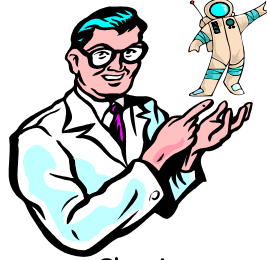
Our next meeting will be elections. Carolyn is coordinating the elections. Dave says he is willing to be our member-at-large, and Bill says he is willing to be treasurer. The other open position is for secretary. To find out the office you will be elected to attend the meeting of May 12th. If you're not there don't complain about your election, just serve out your term. Of course if you are there you can complain but it may not make any difference.

Our club is scheduled to appear at the Wagner Middle School in Winterport on April 17th for a star Party. Set up is from 7:30 to 8:00 PM. There is also a request from the school in Brooks for a Star Party. The requested dates are May 3rd and May 31st. Dave has volunteered to head it up. Dave favors having it on May 3rd as it will get dark sooner. Doug thought he might be able to attend also.

Wade wants us to think about our semi-irregular SunFest star party. Any thoughts, ideas or comments please contact Wade. Alan said he is willing to help put something together in the fall for Astronomy

Where Are We Going?

Mr. Astronomy



Classic
12/03

Some people remember Werner Von Braun and his vision of space exploration. It was and really still is the vision of NASA although since the end of the Apollo program this vision has been difficult to find. Von Braun had always wanted men to go to and explore Mars. Even his develop-

ment of the V-2 rocket was one of the first steps in this vision. In the early 70's Von Braun went to congress and presented this vision. The lack of more support for a proper follow up on the Apollo program resulted in only the space shuttle being funded, and during the following years at NASA even the mention of the desire to go to Mars was forbidden. Only recently has the word Mars reappeared and the agency has spoken about the possibility of going there.

The ISS (International Space Station) has demonstrated the ability to build large structures in space, survive long months of weightlessness, and cooperate with international partners, all necessary first steps to Mars. What is needed now is to get the space shuttle up and running safely and develop some type of lower cost transfer vehicle. It could be something as simple as an Apollo capsule or my favorite, a space type plane powered by some reliable former military or commercial launch vehicle. The Gemini astronauts just loved flying their launch vehicle and stated it flew more like a fighter than a simple orbital launch vehicle. Maybe it is about time to put some fun into the space program too. There is also the need for some type of Orbital Maneuvering Vehicle (OMV) for use at the ISS. This way cargo could be sent to the ISS without having to use the shuttle each time. With all this experience, developing and building a Mars spacecraft would be feasible, plus, lunar bases and exploring and mining asteroids would become possible.

Mr. Astronomy

Day. He suggested we discuss what to do at our July meeting.

With no further business the meeting was adjourned at 8:44 PM.

Future Meetings: May 12th - Elections and Wade will bring in his Criterion Telescope and look for help repairing and cleaning it. I think Wade phrased it as a lesson on how to clean optics and take care of your telescope.

June 9th - Peter Lord will speak on the Night Sky survey System which is being done on Mt. Desert Island. He will give a demonstration on how the system operates and the information it produces.

To be determined - Dave will speak on 6 numbers. Future dates are filling slowly, reserve your time now.

Ralph

E-mail Excerpts

Club news sent by e-mail since the last meeting
Simply for the record and for those for whom we have no e-mail addresses

New Kit Ours

You've earned it! Your NASA Night Sky Network SUPERNOVA! ToolKit is on its way to you...NASA and the Astronomical Society of the Pacific congratulate on your continued dedication to sharing astronomy with the public.

Marni Berendsen, Vivian White, and Kenneth Frank, Your Night Sky Network Administrators, Astronomical Society of the Pacific, nightskyinfo@astrosociety.org, NIGHT SKY NETWORK: <http://nightsky.jpl.nasa.gov/>

Telecon

Extreme Astronomy Telecon May 7th on GLAST with Lynn Cominsky

Get ready for NASA's launch of the newest high-energy space telescope, GLAST. Scheduled for launch on May 16th, Night Sky Network members will be treated to a timely talk by Dr. Lynn Cominsky, Research Scientist with GLAST and Director of NASA Education and Public Outreach Programs, among many other distinctions. She has also worked extensively with SWIFT and XMM-Newton, two other high-energy radiation telescopes, also featured in the SUPERNOVA ToolKit. A PowerPoint to download or view online will be available by May 2nd. You can find it by logging into the Night Sky Network. <http://nightsky.jpl.nasa.gov/>

How to listen with to the Teleconference "Extreme Astronomy": On Wednesday, May 7th at 6:00 pm Pacific Time (9:00 pm Eastern), call the toll-free conference call line 1-800-779-8164 anytime after 5:45 pm. An operator will answer and - You

will be asked for the passcode: NIGHT SKY NETWORK - You might be asked for the call leader: MICHAEL GREENE - You will be asked to give your NAME and the CLUB you belong to, and number of people listening with you.

Excuse to Travel?

To prepare for the International Year of Astronomy (IYA), the American Astronomical Society (AAS) and the Astronomical Society of the Pacific (ASP) are sponsoring a weekend of workshops including one we thought you might especially enjoy on May 31st: Amateur Astronomers as Champions of IYA. Find out about the upcoming plans to support amateur astronomers during IYA, including themes, activities, publicity, and incentives. Hear from NASA and other programs and organizations collaborating with the ASP to provide resources to amateur astronomers in their roles as informal educators during IYA 2009.

The program will be held before the meeting of the AAS, which this year includes an ASP symposium on the International Year of Astronomy, in the St. Louis (Missouri) Convention Center. Each day, there will be 3 or 4 workshops to choose from, addressing different topics and audiences.

The full schedule and more information can be found at: <http://www.astrosociety.org/events/2008mtg/workshops.html> A limited number of scholarships are available to U.S. citizens, to cover travel to the weekend from anywhere in the country (up to \$600) thanks to NASA's Spitzer Science Center. Registration for the workshops is only \$25 per day. Registration for the workshops is limited, and is now open on a first-come, first-served basis.

