



Penobscot Valley Star Gazers

An Astronomical Society of Central Maine

<http://www.gazers.org>

September 2009

Springfield Tales

The PVSOG begins meteorological autumn by returning to John Bapst Memorial High School for the September 2009 meeting on Monday the 14th at 6:30 pm. There they will hear a review of this year's Stellafane convention from Breezy Hill habitué Wade and, most likely, added insights from some of the other club members who stood there alongside him.

Thanks go to Dave not only for last month's program, part two of his discussion of the book *Just Six Numbers*, but also for hosting the meeting at Bennett Hall.

Three Numbers

August 10, 2009



Program: Part II of Dave's presentation of Martin Rees book titled, "Just Six Numbers."

The three numbers that David discussed tonight were lambda, Q and D.

Lambda is sometimes referred to as Einstein's greatest blunder. Lambda has to do with the expansion

of the universe. Einstein thought that the universe was static. As we now know the thinking is that the universe is expanding at an accelerating rate.

Q is a ratio of energies (Q= Amt of energy needed to break up galaxy clusters/Resting energy of clusters).

Dues Are Due October 1st



Regular \$18.00
Family \$27.00
Junior \$9.00

Yes, they have been raised.

Pay at the meeting or send to Bill

Q is a small number, implying the relative weakness of the gravitational force in galaxies and in galaxy clusters.

If $Q < 10^{-5}$, it takes more energy to form stars and galaxies. If $Q > 10^{-5}$, non-galaxy clusters would be larger and denser and

planets would be unstable.

D = 3 (the number of spatial dimensions). Forces such as F_G and F_e obey an inverse law. If $D \neq 4$, smaller changes will result in larger impact, i.e., an asteroid moving the earth out of orbit at a greater distance. Also, atoms would not exist due to unstable orbits.

Dr. Clark summed up the presentation with a question: How did this fine balance of forces come to be? He offered 3 suggestions:

We are here and what is, is. Just accept it.

A creator is/was involved.

We are one of several universes ? (?multiverses). Some have died away due to imbalances or exist in other states.

"If you want to create an apple pie from scratch, you must first create the universe." Carl Sagan

(The note taker apologizes to Dr. Clark, anyone trying to follow these notes and most importantly Martin Rees. JSB)

Treasurer's Report: Dues are due in October

Past Events & Viewings: Sunfest was held at Dale and Julie's. Thanks to Mark & Mike, some good views of the sun were observed. In the evening several telescopes were set up. While observing Jupiter, two dark spots were seen. It was later determined that they were the moon Callisto and it's shadow on Jupiter (COOL!). We also observed some star clusters, and at Shirley's request, a fuzzy Andromeda galaxy.

On the Schedule

(Items Subject to Change)

PROGRAMS

October: Okie-Tex star party, Bill

STAR PARTIES

September 17 - 21: Night Sky Festival, Acadia National Park

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

Bill saw Neptune at the university.

The Perseids will be peaking this week. Also, the comet Swift-Tuttle, can be seen early in the evening.

Bill tried to observe the ISS in daylight.

Future Events: Astronomy Day (October): It was suggested by Alan that this would be a good time to host an event for IYA. A discussion ensued on where to hold the event. Sky & Telescope magazine is having an essay contest on, "Your most memorable astronomy experience." The deadline is in October. Bangor Land Trust Star Party: August 21 at 8:30pm. at Fox Hollow. See Delorme for location. Set up at 8pm. Night Sky Festival: Acadia National Park on September 17 - 21. See the website for more information.

Old Business: June 15th: David sent the PVSG roster to the Astronomical League.

New Business: The U of ME planetarium has some new shows this fall. They consist of "more serious" astronomy and include, searching for the edge of the universe and strange planets. Dick has 46(!) eye-pieces he has collected over 60(!) years. He will bring some next month and may be willing to sell them.

Financial situation: The treasury is low compared to past years. A discussion was held on whether to

raise dues. They are currently: \$9 for students (High School or younger), \$18 for individuals, and \$27 for families. It was moved by Wade to raise the dues to \$10 for students, \$20 for individuals and \$30 for families. The motion was seconded by Alan and passed by the membership.

Library: Mike asked about books the Club owns. Scott has some books and videos. Nick was appointed "Keeper of Club Possessions." By-Laws: Dave has an electronic copy and will send it out to the membership. Astro-Mart's Website has a posting re: advantages for astronomy clubs to have a not-for-profit status. David would like everyone to think about this and be prepared to have a discussion at the next meeting. Real Manseau: Canadian telescope maker, is coming to speak to the ME Society of Land Surveyors organization on October 17th at the Black Bear Inn. It was suggested that if invited, he might also be able to do something for us. Alan may be able to set something up through the U of ME.

Future Programs: September: Wade will talk about Stellafane 2009. October: Bill will talk about the Oakie-Tex star party. Alan offered to do something at the planetarium. Bill also offered to do something on La Palma (?sp) Chile.

Adjourned: 8:29 pm as moved by Bill.

J

From the Treasurer

TD Banknorth where our money is deposited will become TD Bank during the weekend of September 25 - 27.

Astronomy magazine is now having their annual club member magazine subscription drive. From now until October 15 renewing club and club members who wish to subscribe or extend their subscription to Astronomy can subscribe for \$34 for one year and \$60 for two years. This is \$9 off the regular one year price and \$11 off the two year rate. Bring your payments to the October meeting to ensure the receiving of this rate. After October 15 this price is not guaranteed. Subscriptions of subscribing members expire in this order: Wade 11/09, Doug 03/10, Bill 07/11, Carolyn 10/11, Dave 11/12.

It is also time to order Astronomy calendars. These have been very popular in the past and once again the price is discounted to 50% of the retail price of \$12.95. It does not appear there is an additional discount for early bird orders this year but we need to have an idea of the number to order. There were 12 ordered last year and it was not enough but we do not want to over order either.

E-mail Excerpts

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

PVSG to Scale Cadillac

Hi all, Please read through Peter Lord's response to my e-mail about what we are to do at the Night Sky festival in Acadia. I would like those who will be able to help to contact me as soon as possible so that I will be able to send Peter some numbers. Also, I was thinking that it may prove useful for a trip down to MDI to check out what the viewing sites will be like and to get a good feel of where to set up. Perhaps a group trip with picnic lunch? Later, Wade PS-- Stellafane was GREAT!!!! Alan Bean, LEM pilot for Apollo 12 was the keynote speaker!

Hi there Peter, It is getting close to the festival time and I just wanted to run this by you. Presently the star-gazers are scheduled for only Saturday at Cadillac. Would you like some to show up Friday at Blackwoods and Sunday at Sewall? We will be having one more meeting Sept 14, before the festival, and I can e-mail and confirm if you would like us for Friday and Sunday. Thanks and good luck! Wade

Hi Wade, Great to hear from you. Friday we did our first Ranger led telescope viewing program. It was hidden up behind the gift shop on Cadillac, and reservation limited to 20... we ended up with 40. We had a great time and found plenty of bugs to work out... We figure 10 people per telescope is good working goal. This weekend we'll test out Eagle Lake. On clear nights there are 100's of people on Cadillac to watch the sunset.. Given the level of advertising getting as many scopes up to Cadillac on Sat night is our #1 priority. Do you have any sense of how many PVS scopes will be coming? Right now the park now has two, and the IAI has two. We could also use help at Seawall, but not at the expense of Cadillac, Alan may be able to us out, and we'll be there as well. Right now the Blackwoods program is not set up for telescope viewing. We are thinking of adding a walk in telescope clinic on Sunday from 1:00-5:00 in conduction with the activities in the BH town hall... AKA "Exhibition Center". we already have a Starlab, our Hands in Space exhibit , Photography auction. some sales...Dwight is on board for the clinic but he needs at least 2 more people to help him pull it off. It's all coming way to fast! Peter

A Callisto Transit

It would seem that quite a few people saw the "double shadow transit" as the observers did on Saturday night. It turns out that both Ganymede and Callisto are dark enough to show up as a black spot in front of a light area. So, we saw the moon Callisto and its shadow transiting Jupiter. So, we did see the moon in front of the planet - only it was not whitish like I thought. So cool!!!!!! If interested in the comments, check out the discussion in the Solar System Observation (not Imaging) section on Cloudy Nights. Dave
