

19:35 - meeting started (Randy Hemann)

Meeting Attendees

20 present (2 non-members):

Randy Hemann, James Benthall, Robert Ayerhart, Leslie Redinger, Jack Wiltsie, Jeff Newland, Josef Chlachula, Collin Murray, Rick Murray, Julie Gawarecki, Luka Bajzer, Bill Davidson, Jerome Taubel, Jay McLaren, Bob Fealey, Mike Carlin, Kirk Severson, John Attewell, Chris Gawarecki, and Brandon Wyman.

Treasurer's Report

Income: 2 new members, 2 donations, 2 calendar sales.

Expenses:

Balance \$4,546.83

Calendar sales: There was on calendar left, Rick bought it at the meeting, for \$10.

Observing Notes

- John asked about anyone seeing the comet. Just Randy and Kirk. Randy said that Mike from LaCrosse was there with him and Kirk, just the three of them. Cleared as soon as closed the car door. 41-P by the "Big Dipper" with the big scope. It was supposed to be a binocular object. The halo was big. Jay said that was probably why not so good in binoculars, too spread out. Randy said that the Cocoon Galaxy was seen as well.
- Bob Fealey mentioned that he and Jay were out, saw the red spot of Jupiter. It was very red.
- Kirk mentioned doing some solar observing. Moved every 10 minutes. As many sunspots as Randy has ever seen. Jeff Newland only saw one. John mentioned it being about 40 days with none seen.
- Randy was out with a GoPro Silver during a thunderstorm the other night. The moon and Jupiter came out behind clouds with lightning. 340 frames. 2017-03-31. Orion 5 megapixel. Jupiter red spot.

News

- NCRAL 2017 - Chores, assignments, and budget. ...speakers were mentioned:
 - 59 registrations with 4-5 mailing in payment. \$13,007.xx
 - \$8,700 in registrations fees. \$300 in lodging. \$2,600 towards meals.
 - Eagle Bluff deposit and PayPal fees, T-shirts, and miscellaneous.
 - We are \$2,500 to the good right now. Still dialing in Eagle Bluff complexity ... \$1300.
 - \$348 for printing in ther. T-Shirts in there.
 - Bob Fealey asked if he paid or not. Julie said yes.
 - Randy mentioned, that if someone happens to be asked about the cost of the conference, let them know about the complex nature (of reserving Eagle Bluff). We targeted for 30 attendees, above that and we would be in the clear. It was really fortunate to get a better response. NCRAL will keep \$500 of the extra.
 - Dean sent inquiries to a dozen or so vendors, but did not get as big of a response this year. We did get some things for door prizes. The committee was thinking about setting aside a few \$100 for door prizes, and made a list.
 - Most of the door prizes received were from Sky & Telescope:

- Binocular Highlights
- Pocket Atlas ("jumbo shrimp edition")
- Stargazing handouts
- Explore Scientific: 2x Barlow (Televue)
- Randy: star map thing ("dish rag"), RAC mousepad (sealed)
- Amazon.com things on the list:
 - Spaceopoly \$24 (Luka mentioned that Race for The Galaxy is better)
 - "The Martian" (clouded out option)
 - "Gravity" (clouded out option)
 - 10x Nightsky playing cards
 - Socks with stars
 - Constellation coffee cup
- Usually there is a grand prize, the thought was some kind of eyepiec.
- 2-inch barrel, around \$180-350. Possibly ask Craig for a discount.
- Jerome asked about possibly getting some gift certificates, that way one can get what they want. Randy mentioned Bob's Knobs, but did say that it is nice for attendees to physically get something while they are there.
- Randy: Ball...Mars, polar caps, with an acrylic stand.
- Julie: Glassware. A place that has some with constellations. A pair of wine glasses and a pair of pint glasses. She asked if we should get winter sky or summer sky. Vote. Jay suggested wine winter, pints summer, all were in agreement with that idea. (UnCommonGreen.com)
- Julie also suggested checking with ??? on bottles of wine (astronomy related theme). Jerome asked if we had clearance to have something like that there. Julie and John indicated yes. John said that we can bring wine or beer, such as for the social time.
- Randy: Starry Night Pro, \$150 for key. MobileGlobe (\$150).
- All those ideas totaled up to about \$700.
- Josef also had some stamps, but did not bring them to the meeting. He had noticed them at the post-office one day. Pluto Forever stamps, just \$2.00.
- John mentioned that there was some logic behind spending this money on door prizes. We were lucky the last time we hosted a conference, technically at a loss. This time, there were some complaints about the high cost. About 30 to 35 showed up last time, this time those that signed before others essentially subsidized it, as we had tried to break even, so the extra that signed up funded the surplus. We do not want to look like we are on a profit making agenda. The door prizes and social event are plans to make this event over the top. He personally thinks that \$700 for these door prizes is good.
-
- Robert Matel
- Carl Wenning
- Armando Manduca
- Steve Kowaler - Light curves from ... stars ... part of Kepler project, now K2. Part of next scope ready to go up.
- Russ - private astronomer. Light curves of NEOs. May work with students soon.
- Karl Yon

- Dave Faulkner
- Jennifer Anderson - Experimental impact cratering. Just got a ½-million grant..
- Randy & Kirk gave an update on "Elvis". 12-inch Schmidt-Cassegrain donated to the club. Got the keys, opened it up to check it out for observing. "Wasp condominiums", the hair dryer in there was infiltrated, and the manual had pieces chewed off. The controller was lost in the wasp nest. Kirk dug out a mouse skull, along with an entire mouse skeleton (exact genus & species unknown, his wife was a bit upset that the photos were not of a higher resolution). Julie asked if this could be a topic for the conference, how to keep wasps out. There was a video, but it was not working during the meeting. All works, it aligns, stayed on the moon for 1.5 hours. There was about 90 minutes of scrubbing and clean-up involved. The outlet on the post did not work, so batteries had to be used (C batteries that Randy bought).
- Astronomy Day. Randy will be out of town. We will see how it goes after the conference, the rest of the club might be pretty exhausted.
- Ideas for upcoming meetings. John thought a tour of the observatory.

RAC Meetings/Calendar

- April 21-23 NCRAL -- Eagle Bluff
- April 22 Lyrid meteor shower
- April 28/29 Dark Sky Weekend
- April 29 National Astronomy Day - Peace Plaza(?)
- May 9 RAC meeting - tba
- May 26/27 Dark Sky Weekend
- June 13 Club Meeting - tba
- June 23/24 Dark Sky Weekend
- July 11 Club Meeting - tba

Other News/Notes/Announcements

- NCRAL packet assembly while waiting on crew to get from RCTC to Randy's house.

Featured Presentation

- (NCRAL prep, sign-up, and observing).

21:09 – meeting adjourned.

Submitted by Brandon Wyman - Rochester Astronomy Club secretary

NCRAL 2017 Conference

21-23 April 2017

Eagle Bluff

Lanesboro, MN

Friday April 21	
1:00 PM 3:00 PM	NCRAL staff setup
3:00 PM 4:30 PM	Open registration, welcome package, map included
4:00 PM 4:30 PM	Portable out-reach planetarium demonstration #1
4:30 PM 4:45 PM	Break
4:45 PM 5:15 PM	Portable out-reach planetarium demonstration #1
5:15 PM 5:30 PM	Break
5:30 PM 6:30 PM	Dinner
6:30 PM 7:00 PM	Welcome
7:00 PM 7:45 PM	Robert Mutel - The Iowa Robotic Telescope
8:00 PM Sun rise	Observing

Saturday April 22	
8:00 AM 9:00 AM	Breakfast
9:00 AM 9:45 AM	Carl Wenning - Astronomical Bucket List
9:45 AM 10:30 AM	Armando Manduca - The Most Productive Scientific Instrument Ever Built - The History and Discoveries of the Mt. Wilson Telescope
10:30 AM 10:45 AM	Break
10:45 AM 11:00 AM	Group photo
11:00 AM 11:45 AM	Steve Kawaler - Architecture of Planetary Systems Through Host Star Variability

11:45 AM 12:45 PM	Lunch
12:45 PM 1:00 PM	Break
1:00 PM 1:45 PM	Russ Durkee - Equipment and Projects to Include More Student Work
1:45 PM 2:30 PM	Karl Young - Measuring the Cosmic Microwave Background with Balloon-borne Telescopes
2:30 PM 2:45 PM	Break
2:45 PM 3:00 PM	Bingo
3:00 PM 3:45 PM	Dave Falkner - 500 Years of Astronomy - How the Giants of Astronomy Changed Our View of the Universe
3:45 PM 4:45 PM	Business Meeting
4:45 PM 5:30 PM	Break
5:30 PM 6:15 PM	Banquet
6:15 PM 7:15 PM	Jennifer Anderson - Experimental Impact Cratering
7:15 PM 7:45 PM	Awards and wrap-up
7:45 PM Sun rise	Observing

Sunday April 23	
8:00 AM 9:00 AM	Breakfast
9:00 AM 11:00 AM	Check out