West Jersey Astronomical Society

Meeting Minutes for: June 15, 2018

Web Address: http://wasociety.us
Location: Virtua Moorestown
Members in attendance: 14
Officers present:
Pres: Roger Cowley
Vice Pres.: Steve Kutoroff
Sec.: Paul Bender

Paul R suggested he could do a presentation for eyepiece construction.

Roger opened the meeting at 7:47 PM.

Tomorrow is member star watch at Atsion, another Atsion on July 7, and Batsto public watch on July 14.

Roger mentioned a Haddonfield public library program of STEM; they are interested in group projects to add to their workshop. 5-10 and 10-15 yr groups.
Bernie K is going to contribute some of his optic equipment to a STEM organization (a 6" EQ Mount and a microscope). Roger's contact wanted a hands-on project. Talk to **Roger** if you have specific thoughts.

One visitor called himself a "Lapsed astronomer from the 80's", (worked with **Jerry L** (former member) on disc development) has kept up with Sky and Telescope, and has a 3-1/2" Questar in his closet. He is interested in astrophotography, and is a computer geek. He attended **Roger's** talk in Moorestown. Three female visitors also attended: one works at the Franklin Institute and brought her aunt (long interest in stars). 3rd visitor, Phyllis Anne, lives near the Pines and is friend of **Gary W**, who helped fix her telescope. All were interested in WAS star watches.

Steve K put a "clear sky chart" on screen to show prediction for this Sat night's watch; it indicated about 70% prob of clouds, but they were informed that **Bernie H** and **Joe S** will send out a formal on/off call on Sat AM on the e-group and web page for the Atsion June 16th watch.

Bernie K commented that Jupiter's Northern polar region has not recently shown clarity, while usually, on a good night one can see details even with a smallish scope.
Steve K showed his shot of Mars through his 3-1/2" Questar with his Sony camera, 1/40 sec at iSO 2000. Mars was a nice orange disc with a dark marking.
Bernie K: How long does it take Mars to rotate? Visitor Ans ca. 24h 30min.

Bernie K gave a slide presentation on eyepiece design: noting use of multiple

lenses to correct problems of spherical aberration, color flare, etc. New lenses are computer designed instead of the older Ramsden, Orthoscopic and Huygens designs. **Bernie** also referred to Alan's low power wide field eyepiece for the Franklin Inst Zeiss 10" Refractor.

Bernie presented several Formulas for determining Focal Length e.g.:

1/F= (n-1) x (1/R1 + 1/R2): the Lens Maker's formula.

Showed a table of many older lens physical structures: Kepler 1610, Huygenian 1703, Herschel 1768, Coddlington 1825, Orthoscopic 1880, Ramsden 1763, Kellner 1849, Achromatic Ramsden 1849, Symmetrical 1860, Plossl 1860, Panoptic 1985 (6 lens elements), etc.
Alan D took out his wide field low power Frankln Inst scope lens to explain its construction to the visitors. **Bernie** brought in some 2" eyepieces made in the 1990's by **Paul R** with huge field of view, much more reasonable than those then commercially available.

Joe S asked who had seen Vesta recently: **Alan** saw it with binoculars with help from Sky Safari, Saturn close by, the 19th is opposition. **Roger** has seen it on his photos of Saturn that he takes to record the planet's celestial movements.
Alan put a picture used as an advertisement in a recent "Great Courses" catalog with a celestial photograph on screen. **Alan** had given it to **Joe S** who put it Joe's web page (sjastro.org) entitled "Mystery Objects challenge": **Joe** manually looked at past positions of the planets in the Hyades using SkyTools until the bright objects were identified as Jupiter in Gemini and Saturn in Taurus (the Hyades). This image was taken on March 17, 2002. **Jerry L** also took this picture, of these two in April 23, 2002, along with three other planets in the field.

Roger closed the meeting at 9:35 PM.

Submitted by **Sec Paul Bender** on June 24, 2018.

Sent from my iPad