

Black Canyon Astronomical Society (BCAS)

Monthly Meeting Minutes

Thursday July 14, 2022

7:00 to 8:30 p.m.

Minutes prepared by Val Szwarc- co-secretary

Note: **BCAS Business Topics:** Business was not covered during this meeting.

The meeting was a hybrid format with in-person attendance at the Centennial Room in Montrose and Zoom online attendance. Bryan Cashion hosted the meeting at the Centennial Room. Eleven persons attended at the Centennial Room plus a total of 16 online Zoom attendees (13 logins, 3 of whom were pairs) for a grand total of 27 attendees.

Minutes Summary:

President Bryan Cashion opened the meeting welcoming members and guests. As part of recent news, Art Trevena, BCAS vice president showed several newly released James Webb Space Telescope (JWST) images. More images can be viewed at webbtelescope.org. Dr. Bob Grossman mentioned that he and West-end colleagues are developing a website for Astro photos. Bryan was the featured speaker providing an overview of the Sun, including safe viewing practices.

Program Presentation and Summary:

As part of the featured program, Bryan Cashion presented an interesting discussion of our Star, the Sun. Several very interesting facts and safety tips were discussed and include:

- The Sun is almost a perfect sphere of hot plasma that is held by balancing forces of gravity and thermal pressure due to nuclear fusion at the core. The core temperature is about 27 million degrees F.
- The Sun is approximately 860,000 miles in diameter and has a surface temperature of about 5700 kelvin or about 10000 F.
- All energy on Earth can be traced to the Sun
- Activity on the Sun is cyclic, with one cycle being the 11-year sunspot cycle. However, the 11-year cycle is actually part of a 22-year cycle.
- The Maunder Minimum was a period in the late 1670's and early 1700's with very few sunspots. This period also corresponded to cooler climate conditions on earth, that sometimes is referred to as the Little Ice Age.
- Viewing the sun to see sunspots and prominences should be done carefully, using special solar filters that protect the eyes. Projection can be safe if the objective is stopped down to 3 inches or less.
- Direct viewing should use welder glasses # 13 or 14, or equivalent, or safe glass or mylar-type solar filters.
- EAA viewing is also safe, being careful to remove or cap any finder scope optics. Filters need to be used to protect EAA cameras.

Bryan wrapped up the meeting, thanked all that attended the hybrid format, and he adjourned the meeting at approximately 8:15 pm.