

# **Black Canyon Astronomical Society (BCAS)**

Monthly Meeting Minutes

Thursday Sep 8, 2022

14 Zoom connections, including 4 pairs  
11 in-person attendees (including 1 Zoom login - double counted)  
total attendance was 28

Minutes taken by Sara Ungrodt - co-secretary

Note: **BCAS Business Topics:** Business was not covered in this video conference.

Bryan Cashion, President, began the meeting at 7:02 pm and started recording.

## **ASTRONOMY NEWS**

- Art discussed NASA DART mission to evaluate deflection of an asteroid on Sep 26.
- Bob Grossman – IDA has approved proposed boundaries across San Miguel County for a Dark Sky Reserve. If you want to help with the next steps in the application process, contact Bob Grossman.
- Bryan summarized outreach events since the last meeting. Mostly solar, given poor night skies during the period. Art noted that all 3 night scheduled events were clouded out.
- Announcement about Astronomy Festival made official
- Parke and Murti mentioned that the first filament on a star other than the Sun was detected.

## **EXPLORATION & GEOLOGY OF THE MOON**

### **ART TREVENA, BCAS VICE-PRESIDENT**

#### Outline

- ◇ Scientific history
- ◇ Mission timeline
- ◇ Contrasts between Earth and Moon ( presence or lack thereof), including atmosphere, geological activity, surface age, size, magnetic field, impact craters
- ◇ Lunar origin – lead theory now is Theia Impact
- ◇ Surface features and composition – Maria (‘seas’) are huge impact basins partly filled by basalt; highlands are anorthosite of the original lunar crust; craters, rilles, , impact breccia
- ◇ Deep features – studied with seismometers placed by five Apollo missions
- ◇ Craters – Many more on moon than Earth, due to active geology on the latter
- ◇ Water – Ice found in shaded polar craters
- ◇ How to age date features on the moon...crater density Vs. radiometric dates

## **OFFICER NOMINATIONS**

By-Laws require nominations in Sep, elections in Oct. Four positions.

Liz Mauch nominated the present slate of officers. The slate agreed but encouraged the value of change and new perspectives. Nominations are open until Sep elections. E-mail any officer with other nominations or bring to meeting.

### **NEXT MEETING**

Oct 6 7:00 Hybrid meeting at Centennial Room. Parke Loyd, NPS Volunteer and professional astrophysicist will present “Are 90% of exoplanets in the Goldilocks zone actually habitable?”

Bryan will send the link to the Sep meeting recording when available on Zoom cloud.

Bryan closed the meeting at 8:57