

Black Canyon Astronomical Society (BCAS)

Monthly Meeting Minutes

Thursday May 12, 2022

7:00 to 9:00 p.m.

Minutes prepared by Val Szwarc- co-secretary

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

The meeting was online via Zoom. Vice President Art Trevena hosted the meeting and was the featured speaker. There were 17 online logins and 21 total attendees.

Minutes Summary:

Art opened the meeting welcoming members and guests. Concerning recent News, Art mentioned the upcoming Total Lunar eclipse Sunday evening May 15. Also in the news, Art mentioned the first images of a super massive blackhole at the center of the Milky Way. The main program focused on Venus.

Program Presentation and Summary:

Art provided an interesting and comprehensive set of facts about Venus some of which were compared to Earth. Some of the key parameters and missions to Venus that were discussed included:

- Venus has a 224.7 day orbital period around the Sun
- The planet rotates every 243 days in retro-grade
- The USSR/Russia have the most missions to Venus with additional missions by NASA, ESA, and JAXA agencies
- Venus has a diameter of 7504 miles vs Earth's 7909 miles and the mass is 0.815 of Earths
- The average temperature at the surface of Venus is 863F vs an average of 59F for Earth
- Venus's atmosphere is 96.5% CO₂ and is very dense at 92 bars compared to Earth's 1 bar at the mean surface and H₂O is only about 20 ppm.
- As a result of the high concentration of CO₂ Venus has experienced a runaway greenhouse effect resulting in the high surface temperatures
- Venus has a very weak magnetic field suggesting little convection activity in its core
- Like Earth, Venus has a young surface
- Study of Venus's atmosphere helps with exoplanet atmosphere research
- NASA and ESA have several missions planned late in this decade and early in the next decade

Art wrapped up the meeting, thanked all that attended, and mentioned the next meeting on June 16. He adjourned the meeting at approximately 9:00pm.