



# West Valley Astronomy Club

Monthly Meeting Minutes

**March 5, 2024**

**Meeting:** Beardsley Recreation Center - 12755 W Beardsley Rd, Sun City West, AZ 85375 - #1 Chicory Room

**Board Members & Volunteers Present:** Bob Randle (President), Paul Bleikamp (Vice President), Bob Colvert (Treasurer & Program Director), John Hiatt (Outreach Director), Janie Randle (Membership Director), Larry Matney (Star Party Coordinator), Bud and Betsy Johnson (Secretary), along with volunteers, club members and visitors (**= 59 total present**).

**1 - Opening Remarks:** The regular meeting of WVAC was called to order at 7:00 pm by President Bob Randle. Bob introduced himself and thanked everyone in attendance. Five new people paid dues tonight; there are now 106 members, the first time in several years the membership has been this high. Cori Charles, NASA Ambassador, was here to receive her award for her help in the club. Bob announced that two volunteers are stepping down for health reasons: Peggy Ann Tweedy (Hospitality Director), and Lois Caldwell (NSN Coordinator). He is asking for volunteers to please step up and fill in these positions; see anyone on the board to find out what each position entails.

**Speaker:** Bob Colvert introduced tonight's speaker, Dr. Parvathy Prem, PhD.

**Speaker Bio:** Dr. Prem is a planetary scientist at the Johns Hopkins Applied Physics Laboratory in Laurel, MD. She has a PhD in Aerospace Engineering from University of Texas at Austin.

**Topic:** Dr. Prem has been studying the Moon's environment and water cycle. In her ZOOM presentation, she explained the Lunar Reconnaissance Orbiter Mission (LRO), which has been orbiting the Moon, collecting data via 7 sensors. Recent studies have shown the presence of water ice, especially in the north and south polar craters. Is this a result of asteroid/comet impacts? There are impact craters everywhere on the surface, with new craters forming even today. Or is the water from Solar winds' ions combining with Oxygen to form water molecules? Or from volcanic eruptions? There was vulcanism with lava eruptions on the Moon in a period from 3.8 billion to 1 billion years ago. Today there is tectonic movement, but probably no longer any active vulcanism, since the Moon has cooled. Dr. Prem also spoke of upcoming missions to the Moon for more exploration and sample collecting. She also mentioned the environmental impact of lunar landings, spacecraft exhaust spreading over the lunar surface, and how this may affect the Moon's atmosphere.

**3 - Future Meetings:** The next meeting will be on Tuesday, April 2, 2024, at 7 pm.

**4 - Future Outreach Activities:** Two Solar Views – March 19 and March 23, at the Peoria Library. There will be a Star Party at the Surprise Regional Library on April 15.

**5 - Future Club Field Trip Ideas:** Very Large Array (Socorro New Mexico), Animas New Mexico (Dark Sky Site), Kit Peak National Observatory (Tucson Arizona), Meteor Lab (ASU - Tempe Arizona), Mirror Lab (UA - Tucson), East Valley Observatory.

**6 - Other business:** Bob Randle thanked everyone for doing the survey for online dues payment; all wanted it to be available, so they are pursuing this project. There will be a \$1.50 fee per transaction for the online service.

Cori Charles has solar viewers for anyone who wants one, plus other NASA materials at her table.

The door prizes tonight were the Astronomy Magazines (read & return, for next month's prize!), and 2 beautiful posters.

Meeting adjourned at 8:35 pm.

Minutes submitted by Bud and Betsy Johnson, via email on **March 5, 2024**.

Minutes approved by: \_\_\_\_\_ Date \_\_\_\_\_

Bob Randle (WVAC President)