Club learns about telescopes

Astronomy group holds annual banquet

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Popular Astronomy Club

held its annual banquet Oct. 22 at astronomy clubs to form the Asthe Riverside Grille in Rock Island.

their guests attended the event, of the league. which is held annually in October to mark the club's anniversary.

Carl H. Gamble, a manager at John Deere, led the establishment of the Popular Astronomy Club in October 1936. Five years later,



The Popular Astronomy Club PAC became one of 12 amateur tronomical League and today re-About 30 PAC members and mains one of the original members

> The Saturday night banquet featured a buffet dinner, door prizes, awards and a feature presentation by Dr. Dennis Roscoe on the topic "Next Generation Telescopes."

Roscoe holds a Ph.D. in neu-

rophysiology from the University of Arizona and has been a professor of biomedical engineering at Case Western Reserve University in Cleveland and a professor of neurology at the University of Wisconsin College of Medicine: he also founded two medical device companies.

After developing an interest in astronomy, Roscoe changed his career path and currently teaches courses in astronomy and astrophotography at the University of Wisconsin-Waukesha. He was also

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Dr. Dennis Roscoe displays some photos from the Webb Space Telescope during his presentation Oct. 22 at the annual Popular Astronomy Club banquet.

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recently named as a NASA Solar System Ambassador, and he built an observatory outside of Waukesha that he can operate via remote control.

Roscoe's presentation focused on three telescopes: The James Webb Space Telescope, which was launched earlier this year; the Vera C. Rubin Observatory, which is under construction and located in Chile's Atacama Desert: and the Giant Magellan Telescope, also under construction in the perpetually dry and cloudless Atacama.

Roscoe showed a number of the images captured by the Webb Telescope and noted that its ultimate goal is to find the first galaxies formed in the universe. He said the Webb Telescope's field of view ws very narrow, measuring about two arc-minutes square about the same as a small coin held at arm's length.

Even within this limited view, the Webb Telescope has taken images containing as many as 2.000 galaxies. Data from the telescope, Roscoe said, is indicating that galaxies may have been formed earlier in the universe than previously thought.

The Vera C. Rubin Observatory is named in honor of an American female astronomer whose work on the rotation rates of galaxies helped prove the existence of dark matter. It should be ready to receive "first light" by sometime next year.

In contrast to the Webb Telescope, Roscoe said, the telescopes at the Rubin Observatory have a wide field of view and will survey the entire night sky over a period of just a few days. The large amount of data generated by these surveys will be sent to a center in Champaign, Ill., for analysis. The of these objects and possi-



Al Sheidler displays the PAC Member of the Year Award presented to him at the annual Popular Astronomy Club banquet on October 22.

goals of the observatory, he said, will include studying dark matter, mapping the

Milky Way and searching for asteroids and other near-Earth objects.

Telescope will be the largest ground-based telescope in the world when it is completed. Roscoe said the projected completion date was recently moved back to 2031.

Roscoe cited another Illinois connection to these advanced telescopes, as the mounts are being built at Ingersoll Machine Tools in Rockford.

The Giant Magellan Telescope will have a somewhat limited field of view, Roscoe said, adding that its goals will include capturing images of and data from exoplanets that will expand our understanding bly verify the existence of life outside Earth.

Following the presentation, awards were presented to two PAC members: Al Sheidler, who The Giant Magellan received both the Master Outreach Award from the Astronomical League and the PAC Member of the Year Award, and Anne Bauer, who received the Carl H. Gamble Memorial Award, named for PAC's founder.

> The Master Outreach Award is presented by the Astronomical League to recognize those who can document extensive efforts in sharing their knowledge of astronomy with the general public.

> From April 2010 through August 2022, Sheidler participated in 158 events covering more than 412 hours, with 12,217 individ-



presented to her at the annual Popular Astronomy Club banquet on October 22.

public. When the COVID pandemic hit, he adjusted by adding video screens that made it possible for visitors to see images from the telescope without using the eyepiece.

Sheidler was named as PAC Member of the Year for 2022 based on his high level of participation in club activities.

The Carl H. Gamble Memorial Award is presented to club members who make outstanding contributions to amateur astronomy and who advance its popularity. Bauer was cited for her efforts in establishing the Carl Gamble Observatory on land owned by the Nordick family outside of Milan.

Bauer was also honored for the many presentations she has made, often in costume while using ual contacts made with the humorous props, and for

her warm, friendly attitude that makes new PAC members and visitors to club events feel welcome.

Membership in the Popular Astronomy Club is open to anyone with an interest in the night sky no telescope required. The club holds regular meetings at 7 p.m. on the second Monday of the month at the Butterworth Center in

Moline. PAC's last public observing session of the year at Niabi Zoo is scheduled for Nov. 18 beginning at sunset. The observing sessions at the zoo will resume next vear on the third Saturday of the month.

To learn more about the Popular Astronomy Club, go to PAC's website at https://www.popularastronomyclub.org; you can also search for the club's page on Facebook.