

# Palo Alto Rotary Pinion

**November 18, 2024**

Writer: Steve Emslie



*Celebrating 102 years of Service*

## THE MAGIC OF ROTARY 2024-2025

President **GERALDI** called the meeting together at 12:30 PM.

### BRUCE GEE

introduced attending visiting Rotarians and guests:

Jim Ousman, visiting Rotarian from Princes Town Trinidad

Ian Millard Scout Master of Palo Alto Troop 50, Guest of

### GEOFF ZIMAN

Anne Jones, Guest of **KATHY TORGENSEN**

Judy Severson, Guest of **AMY YANG**

Alex Kent, Guest of **SALLY TOMLINSON**



astronomer, Carl Sagan which reflected on the earth's small presence in the solar system.

## PRESIDENTS CLUB

**JOOP VERBAKEN** joined the President's Club in recognition of his upcoming chorale performance commemorating the WWI Christmas Truce and invited all to attend. Performances are Dec. 13 @ 8:00 pm and December 15 @ 4:00 pm, at **Mission Santa Clara**. Info & tickets at [www.scc.org](http://www.scc.org).

**BRUCE GEE** joined the President's Club to recognize the birth of his first grandson, Jordi, and of his mother, Joy. His grandson was born on Joy's 99th birthday. **LE LEVY** joined the President's Club in recognition of **PATTY MCGUIGAN'S** recent book publication, *Leonardo and the Time Travelers*. **RENE MORGAN** joined the Club to recognize the one year anniversary of the passing of her late husband, Don, a Palo Alto Rotarian.

## THOUGHT FOR THE DAY



### JACK CABANESS

presented his thoughts regarding human interaction with space including the first photograph of earth from space, Earthrise, which has been very influential in the environmental movement. He also discussed observations from various

astronauts and how space travel altered their perspective of life on earth. He provided a very thought provoking quote from

## SCOUTING TROOP 50 UPDATE

### GEOFF ZIMAN

introduced **Ian**

**Millard**, of Troop 50 sponsored by Palo Alto Rotary. Scout Master Millard gave a brief update on Scouting activities which included: rafting and hiking trips, canoeing in Canada, trip to Florida, trip to Kings Canyon. He also reported that his small troop was all working on obtaining Eagle Scout



badges. He also summarized by stressing the leadership and outdoor education offered to members of his troop.

President **REBECCA** took the opportunity to present Scout Master Millard with Rotary's annual contribution, supporting Troop 50.

## ANNOUNCEMENTS

President REBECCA reviewed November Rotary Club anniversaries: **MIKE MCMAHON**, 19 yrs; **BEN THRELKELD**, 14yrs; **PATTY MCGUIGAN**, 5 yrs; **GREG HOOD**, 1 yr for a total of 39 years of service.

President REBECCA reviewed November Rotary Birthdays: **OLIVER COOLIDGE; NANCY PETERS, MATT DOLAN, TODD LEWIS, ART STAUFFER JON GOLDMAN, (Matt, Todd, Art and Jon all have November 17 birth dates)**. She showed baby pictures of the birthday celebrants.

REBECCA thanked the members who volunteer to usher at the Palo Alto Players performance of Fiddler on the Roof: **Mike Fogarty; Jon and O'Malley Stouman; Joan Plastiras; Simon Pennington; Karen Rohde; Hersh Davis; Dan Tom and Nancy Kawakita**.

Also acknowledged were the University Flag installers for Veterans Day: **Greg Hood; Suzanne Jain; Eric Jensen; Lee Lippert and Simon Pennington**

Rebecca thanked **MIKE MCMAHON** for completing the club's tax return at a significant discount. MIKE was treated to a shower of confetti appreciation!

REBECCA encouraged all members to attend the club meeting **December 9th** which will be the annual club elections of officers for



the club board and the endowment board including our next President Elect Elect.

## ANNOUNCEMENTS

### HOLIDAY PARTY!

**GREG HOOD AND NANCY PETERS** asked the club to mark down the date of December 11, 2024, 5:30-7:30 pm for the club's holiday party hosted by **PATTY MCGUIGAN**, at her home, which will be a winter extravaganza for all so please try to attend. There will be music, food, drink and good cheer. You know it will be fun when PATTY is in charge!

### TODAY'S PROGRAM

**BETSY BECHTEL** introduced today's speaker, **Garth Illingworth**, Professor Emeritus of Astronomy and Astrophysics, UC Santa Cruz, speaking on "Discoveries from the James Webb Space Telescope".

Professor Illingworth began with visuals and a description of the James Webb Space Telescope (JWST) which was a project first conceived in 1985 even before the Hubble Telescope was launched. JWST is the most ambitious project endeavored on earth and involved multiple thousands of persons across many countries. Professor Illingworth showed the first JWST images received on July 12, 2022 and compared JWST to Hubble which is a much larger telescope able to look back 13.5 billion years to the origins of the universe.



Professor Illingworth described the mechanics of the telescope which is essentially a classic light collecting device. The engineering of such a machine in space presented numerous scientific and engineering challenges. There were over 280 "zero point failures" which

means if any one of these steps failed, the mission would end. He described the two main components; the telescope itself and the solar array. The telescope itself was manufactured at the NASA facility in Maryland and the solar array was built at Northrup/Grumman in Redondo Beach California and were united before launching from French Guiana. Professor Illingworth showed and described the delicacy of transporting each component as well as the assembled product to its ultimate launch site in South America.

Professor Illingworth showed actual videos taken when the JWST separated from the rocket booster and was free floating in space. The deployment of the solar array was especially critical since the telescope only had a short battery life until energy could be collected from the sun. The video showed the unexpectedly early solar shield deployment much to the joy of the JWST team. He went on to report that because of the accuracy of the Ariane rocket placing the telescope in a precise orbit, much of the booster fuel on board was conserved which greatly increased the life expectancy of the telescope which is now expected to last 20 years, 10 years longer than designed. JWST was fully commissioned in June 2022 and is performing exceedingly well.

Professor Illingworth discussed the scientific and political obstacles the JWST team encountered over the 35 year history of the project. From a scientific perspective, the team needed to conceptualize the next generation of telescope even before the first one, Hubble was deployed which proved to be very challenging for the team. From a political perspective, cost and budgets were always in crisis. While the project was funded by several nations including the European Space Agency, the US was a major funder. Because the project was behind schedule and significantly over budget, the US congress grew impatient and often threatened to cut funding. Fortunately, forceful lobbying from the science and technology community was able to convince congress to see the project through to completion.

Professor Illingworth concluded by acknowledging the multiple thousands of people involved in realizing this most monumental task implemented by mankind and asked for questions. He explained that the US was not the only funder of the project but did carry a majority of the financial burden. He also explained the urgency of deploying the rocket as soon as it arrived at the launch pad. Prolonged exposure on the launch pad could mean the telescope's mirrors could be contaminated by dust and chemicals which would reduce the clarity of future images.

Slides from the talk [can be viewed here](#).

More videos of Prof. Illingworth's talks are available here:

- <https://www.youtube.com/watch?v=FilhX0vXkTg>
- <https://www.youtube.com/watch?v=-QAMPfQBvGo>
- [https://www.youtube.com/watch?v=vHyAA\\_p2cnc](https://www.youtube.com/watch?v=vHyAA_p2cnc)

## CLOSING REMARKS

President Geraldi adjourned the meeting at 1:30. Professor Illingworth agreed to stay after the meeting to answer individual questions.

## TODAY'S VOLUNTEERS

Greeters: **Betsy Bechtel, Anne Cribbs**

Welcome Desk: **Katie Seedman**

A/V: **Dana Tom**

Microphone: **Oliver Coolidge**

Pinion Writer: **Steve Emslie**

Pinion Editor: **Ginny Lear**

## UPCOMING PROGRAMS AND EVENTS

<b>November 25</b> 12:15-1:30pm Club Meeting	<b>Desiree Lyons, CEO, Namaste Direct:</b> A World Community Service Project
<b>December 2</b> 12:15-1:30pm Club Meeting	<b>Elena Kadvany, SF Chronicle Food Reporter</b> The Palo Alto Restaurant Scene and Life as a Food Reporter
<b>December 9</b> 12:15-1:30pm Club Meeting <b>Election of both Club and Endowment Board members</b>	<b>Kenneth N. Lee, Chaplin Associate, Office for Religious &amp; Spiritual Life Stanford University</b> Hindu Religion and Cultural Celebrations
<b>December 11</b> 5:30-7:30 pm	<b>Holiday Party! Festive Home of Patty McGuigan! Halls will be Decked!</b>