

VALLEY ENGINEERING, SCIENCE & TECHNOLOGY CLUB

June 2018 NEWSLETTER

www.engineersaz.com

The Engineers Club is a social organization which meets regularly for lunch with a speaker on a technical topic. Spouses are invited and many attend regularly. Short field trips are occasionally scheduled. Membership is open to anyone who has worked in or related to the engineering or scientific fields. Meetings are held at 11:30am on the first Friday of each month (unless otherwise noted), October through June, at Briarwood Country Club, 135th and Meeker in Sun City West, AZ
Visitors are always welcome - - just call Reservations at (623)546-9112 to let us know you are coming.

JUNE 1 PROGRAM

The Search for First Light: New Telescopes that will Expand Hubble's Frontier

Rogier Windhorst, PhD Professor of School of Earth and Space Exploration, ASU



Rogier Arnold Windhorst (born 1955) is an astronomer and a professor of physics and astronomy at Arizona State University. He received his Ph.D in astronomy in 1984 from the University of Leiden and did post doctorate work at Mt.Wilson and Las Campanas Observatories. He currently serves as associate chair at Arizona State and is among six Arizona state faculty who were awarded Regents Professor appointments in 2006; he presides over the School of Earth and Space Exploration at the university.[1] In 2008, he became Foundation Professor of Astrophysics at Arizona State University and Co-Director of the ASU Cosmology Initiative.[2]

Windhorst has authored over 100 published scientific papers and has given over 125 lectures at seminars. His research has led to new understandings of how the universe first began. He also studies black holes. His research focuses on Astrophysics and Space Science, and he is the principal investigator of the Hubble space telescope mid-UV bright galaxy survey.[3] He is one of the six Interdisciplinary Scientists worldwide for the James Webb Space Telescope, and member of the JWST Flight Science Working Group. Windhorst is involved in planning the JWST science performance, and in critical oversights of its entire design and construction phase.[2]

Abstract: Rogier Windhorst, astronomer, Regents' and Foundation Professor, Co-Director of the ASU Cosmology Initiative, and James Webb Space Telescope Interdisciplinary Scientist will discuss next-generation telescopes that will expand the frontiers first discovered by the Hubble Space Telescope.

Of particular focus will be NASA's new 6.5 meter James Webb Space Telescope and the 25-meter Giant Magellan Telescope under construction in Chile. The James Webb Space Telescope, launching in 2019, is a large space-based observatory, optimized for infrared wavelengths, which will compliment and extend the discoveries of the Hubble Space

Telescope. It will look back into the first 200-400 million years after the Big Bang when the first stars were formed.

The Giant Magellan is a member of the next class of giant ground-based telescopes that promises to revolutionize our view and understanding of the universe with a resolving power 10 times greater than the Hubble Space Telescope. Both new telescopes will complement each other and use gravitational lensing to detect the first galaxies, and possibly the first stars and black hole accretion disks.

OCTOBER 5 PROGRAM

Arizona's a Desert: You're 'Surprised' it's Hot and Dry

Nancy J. Selover, Ph.D. State Climatologist Arizona State University Climate Office



Nancy Selover received her Ph.D. in Geography, specializing in meteorology and climatology from Arizona State University. She has been the State Climatologist for Arizona since 2007, and serves as co-chair of the Monitoring Technical Committee of the state Drought Task Force, and participates in the statewide Flood Warning Task Force and the state and county Hazard Mitigation Plan updates. She is the state co-chair of the citizen-science precipitation monitoring network, CoCo-

RaHS (Community Collaborative Rain, Hail and Snow). The State Climate Office is located at Arizona State University and provides climate data and information to researchers, government and non-government agencies, and the public. Her research interests include the climate monitoring, urban heat island, evaporation, drought, monsoon and climate adaptation.

Abstract: Arizona has a wide variety of climate regimes based on our physical location and topography. We will explore why we are so hot and so dry, or occasionally so wet, including what processes affect our weather, and how well, or poorly, they can be predicted. A look at the distant

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past and the recent past will explain why we have had to be so adaptable. What do the climate modelers project for our future, what are they those models based on, and what are the implications for our future weather? Finally, a closer examination of Phoenix, where about 5/6 of our population resides, will demonstrate just how much we have affected our local climate and what we're planning to do about it.



**2018 ExtraOrdinary
Technology Conference**
Albuquerque, New Mexico
August 8 - August 12, 2018
Hosted by TeslaTech

ExtraOrdinary Topics Featured...

Tesla Technology • Magnetic Motors • Zero-Point Energy
Energy Saving Devices • Cosmic/Radiant Energy •
Brown's Gas • Low Temperature Plasma • GEET
ElectroGravitation • ElectroMedicine Magnetic Healing

<https://teslatech.info/ttevents/2018conf/prghome.htm>

TREASURER'S REPORT MAY 2018

General Fund Balance: \$11,184.80
Scholarship Fund: \$ 281.00
Membership Total: 148

May 50/50 \$100.00 - winner was Lou Agea Thank You!

2018 Membership dues are now due—\$20.00

LUNCHEON MENUS

June 1: #1 Roast Pork Tenderloin or #2 Grilled Salmon
Both entrées come with salad, steamed cauliflower and broccoli, roasted red potatoes, and cheesecake. (*Grilled Vegetable Plate or Fruit Plate also available*)

October 5: #1 Meat Meal or #2 Fish Meal Both entrées will come with salad, veggies, and dessert. (*Grilled Vegetable Plate or Fruit Plate also available*)

RESERVATION POLICY

The cost of the monthly luncheon beginning in Jan 2018 will increase to \$22.00 cash or check. The reservation deadline is 6 PM Monday before the meeting.

Late reservations cannot be guaranteed the regular meal. Call Dave Whitehouse to cancel your reservation.

Note that the full cost of the luncheon will be charged for "no-shows" and cancellations after 5 PM on Wednesday before the meeting.

Please have cash or make out your check in advance.

FUTURE MEETINGS

November 7

Title: Artificial Tree turn waste into Algae
Speaker: Klaus Lackner PHD, ASU



**Central Arizona Project. Your Water.
Your Future**

May 4, 2018 Speaker Jennifer Brown, Central Arizona Project CAWCD Board of Directors, representing Maricopa County
For more information on our speakers, please visit our website at www.engineersaz.com