

ENGINEERS CLUB OF THE WEST VALLEY

MAY 2012 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 had close ties to the engineering or scientific fields. Meetings are held at 11:30am on the first Friday of each month, October through June, at Briarwood Country Club, 135th and Meeker in Sun City West, Arizona. Visitors are always welcome -- Reservations are required -- Just call (623)544-0942 to let us know you are coming.

MAY 4 PROGRAM

Widefield Imaging Surveys from Space

Paul A. Scowen, PhD
Arizona State University



Over the past decade many aspects of observational astronomy have moved in the direction of needing truly widefield surveys. These surveys open new frontiers into the understanding of subject matter as diverse as star and planet formation, ranging out to the formation of the first galaxies. These needs have been rooted in the origin of the Sloan Digital Sky Survey and the LSST survey telescope. Both of these are ground-based programs.

However, none of these can deliver the diffraction-limited resolution needed that is only available in space. Laying the foundation for this kind of widefield survey from space requires the development of new optimized detectors. These detectors must be tested, not only on the bench, or the telescope, but also on suborbital rocketry.

Dr. Scowen will outline what is being done to lay this groundwork and the required path to the delivery of truly breathtaking data from space.

JUNE 1 PROGRAM

Arizona Highway and Transportation Issues

Brock J. Barnhart
Assistant Communications Director, ADOT



Mr. Barnhart is responsible for coordinating communication strategies to maintain a positive relationship between the Arizona Department of Transportation and the many elected officials at all government levels. He has been a part of the Arizona Department of Transportation's communication team since 2004.

While directing public involvement and partnering programs in Maricopa and Pinal counties, Brock supports the delivery of ADOT's Five Year Transportation Facilities Construction Program and also the Maricopa Association of Governments' Regional Transportation plan.

His work is accomplished by involving communities, elected officials, stakeholders and the general public throughout every step of the transportation process.

Prior to joining ADOT, Brock held other leadership roles in the private sector. He received a Bachelor's Degree in Business from Eastern Oregon University.

The presentation will focus on some of the projects that are directly associated with the West Valley community.

NOTES FROM . . .

President Les Sherry



Survey Results

Welcome to our May 2012 luncheon meeting. My four children (three in the engineering /scientific fields) have flown in from California and Florida for this luncheon to give me moral support...and probably to check out my mental and physical status.

On a serious note, I want to thank all of you who participated in the questionnaire that was presented at last month's luncheon meeting. The questionnaire turned out to be a great success and provided some very helpful information. In short, we no longer have to debate the health, vigor and future of our club. We are not only healthy but we have a very rich cadre of talented members who are willing to consider stepping up in many areas to assure that the club continues to thrive and provide the high quality scientific venue that we have developed and maintained over the years.

To illustrate why I am elated, let me give you a quick overview of our findings based on questionnaire responses from 64 members, 19 spouses, and five guests. The responses were essentially 100% positive and supportive of the club. We received hundreds of suggestions and comments pertaining to club satisfaction and possible improvements, and recommendations for future luncheon speakers and field trips. This is a rich data base that will keep us busy and benefit the club for several years.

The 59 member-only questionnaires returned were especially enlightening. About 50% indicated that they may consider a board position in the future and 69% indicated they would consider assisting one or more board members. Also, 48% indicated that they would consider supporting a one-time special project to benefit the club involving one or more of the 12 skill areas noted on the questionnaire. The responses ranged from five to ten for each skill area. Several of our members apologized for not being able to provide additional support to the club due to advanced age, health issues, and working full time with variable travel schedules. That is to be expected when you consider that a large majority of our club members are retired. Several members indicated that they could not provide support because they were snowbirds. I would like to point out that several of our board members (including myself) are snow birds. Also, for those of you who are concerned, I want to assure you that all questionnaires are being considered confidential on a need to know basis.

In summary, and in the vernacular of NASCAR, I think we have an "AWESOME" amount of skill, experience and vitality in our club and our continued success and growth is assured if we use them judiciously.

2012 OFFICERS

President	Les Sherry	975-9081
Vice President	Bob Farrell	810-5095
Secretary	Jodie Lawrosky	238-5256
Treasurer	Bob Latvalla	546-7801

COMMITTEE CHAIRPERSONS

Programs	Daryl Lund	271-7337
Programs	Bob Farrell	810-5095
Membership	Bob Kessler	910-7054
Reservations	Dave Whitehouse	544-0942
Luncheons	Doug Keeler	480-8476
Luncheons	Hal Clemett	546-4941
Scholarship	Don Porter	556-1754
Scholarship	Don Johnson	975-1657
Scholarship	Gerry Montag	546-7963
Member at Large	Fred Scheske	556-2892
Newsletter	Bill Harrison	546-4943
Event Support	Ralph Palmer	815-8143
Web Site	David Campbell	518-4871
Publicity	Maurice Hoyt	533-4213
Field Trips	Keith Morrow	546-3080
Past President	Don Block	546-0557

BOARD EMAIL ADDRESS: board@engineersaz.com

TREASURER'S REPORT 4-16-2012

General Fund Balance:	\$7,264.07
Scholarship Fund Balance:	\$1,709.48

LUNCHEON MENUS

May 4: Beef Stroganoff over Egg Noodles with Fresh Vegetables and Rainbow Sherbet with Rolled Cookie. (Entrée Option: Fruit Plate or Grilled Vegetable Plate)

June 1: Chicken Pot Pie. All white chicken with peas and carrots in a creamy sauce and baked in a pie to a crispy golden brown. Peppermint Ice Cream and Cookie. (Entrée Option: Fruit Plate or Grilled Vegetable Plate)

RESERVATION POLICY

The cost of the monthly luncheon is \$17.00 per person. The reservation deadline is 5 PM Monday before the meeting. Late reservations cannot be guaranteed the regular meal. Call Dave Whitehouse if you cannot keep your reservation. **The full luncheon cost is due for "no-shows" and cancellations after 6PM on the Wednesday before the meeting.**

RESERVATIONS Dave Whitehouse (623)544-0942

Remember Memorial Day on May 28th

WELCOME NEW MEMBERS

Robert Schneider
and
James Schlenvogt

Club Membership is 142

**How Will it End?
By Kess Alley, PhD**

Human beings have always been fascinated with the end of the World, the Sun, and even the Universe itself. There is lots of speculation but also some sound science regarding these questions. A perpetual field of study.

There is a more or less scientific accepted conclusion regarding the fate of the sun and earth. The end of the Universe is a much more complicated issue and is far from being settled.

The sun, basically a nuclear fusion furnace, is so large that it could hold one million Earths. It is about 5 billion years old and is expected to shine at some level for at least another 5 billion years. It will steadily get larger and brighter as it ages.

In about one-half billion years, the warming will accelerate with dire consequences for our Earth. The sun will slowly become red and distended and the mantle will reach out even to the Earth. Carbon dioxide will be driven into the ocean and photosynthesis will stop. The ice caps will melt, equatorial regions will flood and then all water will evaporate into space. In about 3.5 billion years from now, the Earth will be burned-out, desiccated rock.

Our sun will not become a supernova but, over billions of years, will go through various dying stages and eventually become a so-called brown dwarf. It will then wander forever in the vastness of interstellar space.

These cited events are so far out in the future that we must consider that evolution may have taken place with humans. Perhaps science and technology will have advanced to the stage where we can influence some of these anticipated events.

The fate of the Universe is still uncertain. It could keep on expanding forever or, if there are sufficient forces, mainly total mass, it could eventually go through a complete contraction and have a complete new beginning. We have plenty of time to contemplate this cosmic question.



Dr. Jeffery LaBelle receives a certificate of appreciation from Bob Farrell for his presentation on the development and use of various medical devices and artificial limbs that improve the quality of life of those with major disabilities.