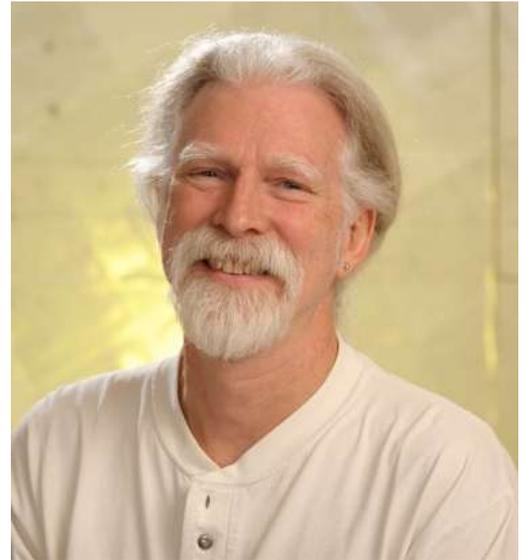




The NASA Kepler Mission: Recent Exoplanet and Astrophysical Discoveries

Dr. Steve Howell, NASA Ames Research Center

Abstract: Nearly four years ago, NASA launched a space telescope with the sole purpose of finding exoplanets, planets orbiting other suns. To date, the Kepler mission has discovered nearly 3000 exoplanet candidates, many in multiple planet systems, and hundreds of which are near the size of the Earth. We will explore the wide variety of exoplanets discovered and focus on the most recent and interesting discoveries. Are other worlds like our Earth out there? We will see that the answer is, so far, a strong maybe. We will also discuss Kepler's paradigm changing results in stellar astrophysics. Kepler photometry is over 100 times the precision of ground-based observations. Combined with its essentially continuous time coverage, these data provide a unique and spectacular data set for astronomy. Some specific examples, near to my heart, will be discussed as well as recent highlights in astrophysics.



About our speaker: **Dr. Steve Howell** is currently the project scientist for the NASA Kepler Space Mission. Kepler was launched in 2009 with a goal to discover planets orbiting other stars - exoplanets - using the transit technique. To date, Kepler has discovered over 3000 exoplanets including many hundreds which are similar to the Earth in size. Dr. Howell is a highly distinguished astronomer having worked in the field for over 25 years. He has been a university professor, built instruments for ground-based telescopes and the NASA Space Shuttle, worked at Kitt Peak National Observatory, and now is the science head for NASA's most scientifically and publicly visible mission, Kepler. He is the author of over 500 scientific publications, numerous popular and technical articles, and has written and edited several books on astronomy and astronomical instrumentation. Dr. Howell is highly involved with informal and formal scientific education for kids to adults and is an entertaining speaker. He currently lives in Redwood City, CA where he loves to hike, prepare gourmet meals, and play blues music.



Wednesday, January 9, 2013

Reception: 6:00; Dinner: 7:00; Talk: 8:00

Meal: Buffet Style

Cost: \$30 (OSSC Student Members are Free!)

**[The Chartroom at Cal State Long Beach](#)
[6049 E. 7th st., Long Beach, CA 90840](#)**

Top of escalator in [University Dining Plaza](#)
(562) 985-4090

Parking: Lot 1 or Parking Structure 1 if arriving before 6pm, Lots 3&4 if arriving after 6pm

On-line Registration: www.ossoc.org or

Contact: [Joseph Diep](#), OSSC Arrangements Chair,
Events@ossoc.org, 951-926-2994

Please Register by January 7, 2012

Please post this notice and invite your friends & colleagues to attend!