



PTICAL SOCIETY  
OF SOUTHERN CALIFORNIA

# Meeting Announcement

February 10<sup>th</sup> 2016

## Freeform and Related Optical Systems

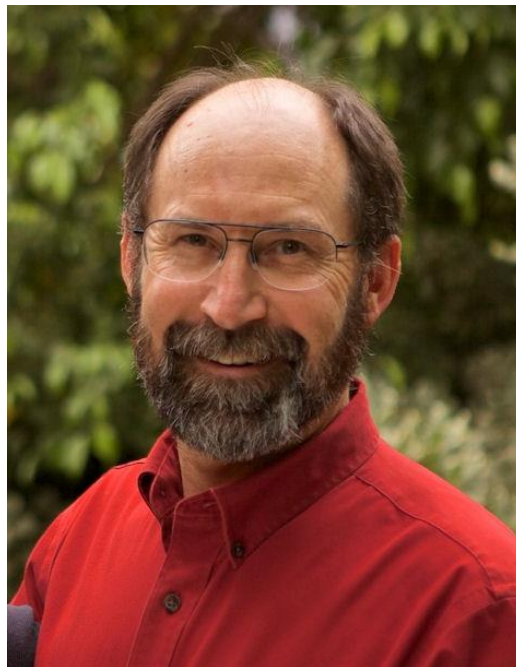
Dr. John R. Rogers, Synopsys Inc.

"Freeform Optics" is a new category of optics that is currently getting a great deal of attention, in both the optical design and fabrication communities. In this talk, we will examine the need for freeform optics and compare freeform optics to other rotationally non-symmetric forms of optics. We will address some interesting questions relating to the design of such systems: What happens to the aberrations of an optical system when symmetry is broken? What is the best way to address the asymmetric performance issues that arise? Is there any intuitive way to understand how such systems behave, or should we just keep adding degrees of freedom and hope the optimizer finds something that works? In addition to the extra degrees of freedom that freeform surfaces offer, are there any drawbacks, from an optical design perspective?

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rotationally non-symmetric systems as well as methods for the desensitization of optical systems.

**About our speaker:** Dr. John Rogers has 33 years' experience in optical design and metrology. He has designed a wide variety of optical systems, and he has actively researched optical design methodology for



Dr. Rogers earned his Ph.D. in Optical Sciences at the University of Arizona in 1983, with a Ph.D. topic relating to the design of off-axis systems. After leaving the university he worked at Kern AG, in Switzerland, as an instrument designer. In 1984, he joined the faculty at the University of Rochester, where he continued his research in the field of off-axis design. In 1988, he returned to Switzerland to work at Leica on surveying instruments and mapping cameras, gaining experience in both optical design and metrology. In 1989, he moved to Optical Research Associates (now the Optical Solutions Group at Synopsys) where he is a Senior Scientist in Imaging Engineering.

For Directions: <http://goo.gl/maps/f4mc4>



**Wednesday, February 10<sup>th</sup>, 2016**

**Reception: 6:00; Dinner: 6:45; Talk: 8:00**

**Meal: Buffett Style Dinner and Bar available**

**Cost: \$35 if registered by Feb. 5, \$40 after.**

**(OSSC Student Members are Free if registered by Feb. 5, \$15 after)**

**Courtyard by Marriott**

700 West Huntington Drive

Monrovia, CA 91016

(626) 357-5211

**On-line Registration: [www.osscc.org](http://www.osscc.org)**

or

Contact OSSC Arrangements Chair Bo Wang

[Events@osscc.org](mailto:Events@osscc.org), 714-420-8234

**Please Register by Feb 3, 2016**

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