

Please register with richienagi@gmail.com
(for food estimate – last minute walk-ins are completely welcome)

Those who have registered are listed at the bottom.



Co Presidents
Virginia Ford
Eric Ford
Announcements

Programs/News
John McDonald

Secretary and
arrangement
Fred Houston

Treasurer
John Tardif

Website, Mailing list
Richie Nagi

Ventura OSA (VOSA) Announcement for May 14, 2019 ([Please RSVP](#))

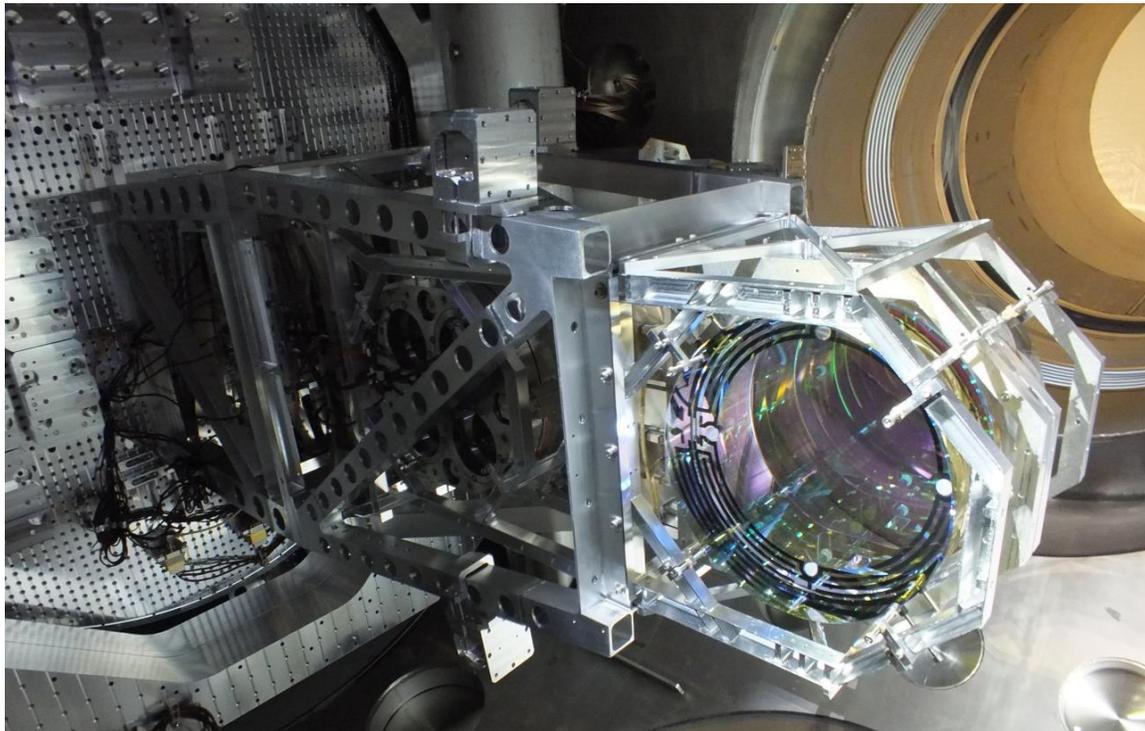
Using optics and precision metrology in LIGO to measure
black hole mergers from across the universe

By

Dr. Joshua R. Smith

Dan Black Director of Gravitational Wave Physics and Astronomy
Cal State University, Fullerton





Abstract:

In 2015, the two detectors of the Laser Interferometer Gravitational Wave Observatory (LIGO) detected gravitational waves from the coalescence of a binary system of black holes. This discovery could not have been made without a century of advances in optical technology and precision metrology. I will give an overview of gravitational waves and LIGO, describe the optics involved and current optical challenges, discuss the discovery of gravitational waves from merging black holes and neutron stars and end with how optical technology is being used to prepare for the next-generation of gravitational-wave observatories.



Joshua Smith

Joshua Smith directs the Gravitational-Wave Physics and Astronomy Center (GW PAC) and is a professor of physics at California State University, Fullerton.

Josh grew up in Indian Lake, an Adirondack mountain town in upstate New York. He attended Syracuse University in central New York, graduating in 2002 with a BSc in physics. He then moved to Germany to study gravitational physics at the University of Hannover's Max Planck Institute for Gravitational Physics / Albert Einstein Institute, earning a doctorate in 2006 for his work on the GEO600 gravitational-wave detector. From 2008 to 2010, he returned to Syracuse University as a postdoctoral associate and worked with Professor Peter Saulson on optical technology and detector characterization for the Laser Interferometer Gravitational-wave Observatory (LIGO).

Josh has been on the physics faculty at California State University Fullerton since 2010. He conducts experimental gravitational-wave research and teaches physics and astronomy. His research is focused on using laser interferometers, such as LIGO, to observe gravitational waves from astronomical sources (such as black holes and neutron stars) in collaboration with colleagues in GW PAC and the international LIGO Scientific Collaboration.

Josh is married to Felicitas Smith and they live with their daughter Kira and dog Steve in Fullerton, California.

Venue For Event

**Advanced Spectral Technology, Inc.
94 W Cochran St Suite A
Simi Valley, CA 93065**

[805.527.7657](tel:805.527.7657)

GPS Lat/Lon: 34.282265, -118.799712

6:00p Mixing and Stand Up Dinner

7:00p Speaker

\$20 donation on site

**(it is a donation for food, insurance and venue.
If you need a no-food, student, old age or other discount,
please give yourself one).**



From Eric & Ginny

Richie Nagi has been a huge help in communicating with our VOSA group, but his job is taking him north to the bay area. We would like to thank him for his efforts and wish him much success in his new endeavors. Thank you Richie.

Richie will continue to help us; but we are looking for someone to take his place and help with our mailing list and membership communications. If you are interested, please contact Ginny or Eric at virginiag4d@gmail.com or erich4d@gmail.com.

The Ventura section of the Optical Society of America promotes optical science and optical engineering and facilitates communication and networking among optics professionals, students, and optics aficionados in the geography reaching roughly from Santa Barbara to Pasadena.

Upcoming meetings:

June 11th: Robert E Parks, Microoptics and Diffusers

If you want to be added or removed to/from our mail list please notify us at richienagi@gmail.com

Our sibling organization OSSC Meets 2nd Wednesdays.

For our meeting (Ventura OSA) please register to richienagi@gmail.com

RSVPs:

1. Ginny Ford
2. Eric Ford