

# Spring Banquet

Wednesday May 4<sup>th</sup>, 6pm

**UCSB Mosher Alumni House** 

All Santa Barbara photonics scientists are invited to the 2nd annual UCSB Photonics Society Banquet!

The banquet brings together local photonics scientists from industry & academia, to meet and learn about local-area photonics.

**Graduate Students: FREE** 

Non-Students: \$15

The event includes a social hour and dinner (included in ticket), and will be followed by lectures from sponsors <u>HP Labs</u> & <u>Freedom Photonics</u>, who will describe their local photonics activities. The UCSB Dean of Engineering, Rod Alferness, will also deliver a lecture for The <u>American Institute</u> for Manufacturing Integrated Photonics (AIM Photonics).

This year we have the pleasure of hosting **Dr. Joshua Smith** from Cal State Fullerton's Gravitation-Wave Physics & Astronomy Center, who will give a talk on the groundbreaking detection of gravitational waves:

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

On September 14, 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 a merging binary black

hole system, and end with prospects for future gravitationalwave observations.

Joshua Smith directs the Gravitational-Wave Physics and Astronomy Center (GWPAC) and is an associate professor of physics at California State University, Fullerton. He was born in Indian Lake, NY and attended Syracuse University, graduating with a BSc in 2002. He earned his doctorate in 2006 from the University of Hannover's Max Planck Institute for Gravitational Physics / Albert Einstein Institute for his work on the GEO600 gravitational-wave detector. Prior to joining Fullerton in 2010, he



was a postdoctoral research associate at Syracuse University. Currently, Smith is active in gravitational research, astronomy education research, and teaching physics and astronomy. His research is focused on detecting gravitational waves from astronomical sources using LIGO in collaboration with colleagues in GWPAC and in the international LIGO Scientific Collaboration.

This event has been made possible by the generous support of our sponsors, <u>Freedom Photonics</u>, <u>HP Enterprise Labs</u>, the <u>IEEE</u> and the <u>UCSB Graduate Student Association</u>. Representatives from our sponsors will additionally present some of the photonics activities of their companies.









### Photonics Society at UCSB & AIM Photonics' 2016 Spring Banquet

#### When:

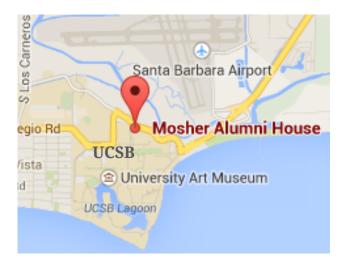
Thursday May 4th

• Social Hour: 6:00 pm

• Dinner: 6:30 pm

Presentations: 7:00–8:00 pm

(one free drink included with ticket)



#### Where:

Mosher Alumni House @ The University of California Santa Barbara Park at University Plaza, off of Mesa Rd. Signs will be posted.

#### Cost:

Graduate Students: FREE

Non-Students: \$15

Catered dinner & one free drink included.

Seating is limited – Register online before May 1st!



or search for "UCSB Photonics Society"