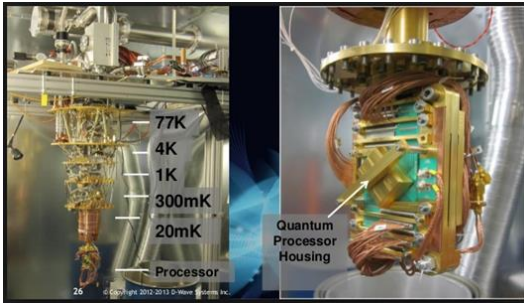


Quantum Computing & The National Quantum Initiative

Dr. Sandy Irani, UC Irvine & Dr. Jonathan Habif, USC

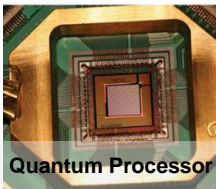


Quantum computing is the use of quantum-mechanical phenomena such as superposition and entanglement to perform computation. A quantum computer is used to perform such computation, which can be implemented theoretically or physically.

The National Quantum Initiative (NQI) Act is an Act of Congress passed on December 13, 2018 and signed into law on December 21, 2018. The law gives the United States a plan for advancing quantum technology, particularly quantum computing. OSSC Fellow Donn Silberman will briefly review the NQI and introduce our speakers.

Visit <https://www.opticsage.com/donn-s-quantum-explorations> to explore these topics prior to the meeting.

About our speakers: Dr. Sandy Irani received her PhD from UC Berkeley in 1991 after



which she was a University of California President's Postdoctoral Fellow at UCSD. She joined the faculty of UC Irvine in 1992 where she is currently a full professor. Much of her research has focused on algorithm design and analysis with an emphasis on applications to computing systems. In the last few years she has been working in Quantum Computation and Quantum Information Science.



Dr. Jonathan L. Habif is an experimental physicist and research lead at the University of Southern California information Sciences Institute (ISI). His research has focused on photon-starved, classical communication and imaging, quantum-secured optical communications in free-space and fiber, and integrated nano-photonics for both classical and non-classical applications. Prior to joining ISI, Dr. Habif was with BBN technologies where he served as principal investigator for a number of DARPA-sponsored research programs, partnering with university collaborators to demonstrate revolutionary optical technologies impacting traditional communications, sensing and computation systems.



Reception: 6:00; Dinner starts @ 6:30
OSSC Business: 7:00; Presentations: 8:00

Dinner – Cost: \$35

\$40 after June 7th

OSSC Student Members: \$10,

\$20 after June 7th

Brea Civic & Cultural Center

1 Civic Center Circle

Brea, CA 92821

(714) 990-7600

On-line Registration: www.osscc.org or

Contact: Alex Small, **OSSC** Arrangements Chair,

arsmall@cpp.edu

(909) 869-5202

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