The Seismological Society of America (SSA) cordially invites you to a briefing on Capitol Hill:

# Can You Hear It Now?: Using Fiber Optic Networks to Listen for Earthquakes

## Monday, June 17, 2019 from 10-11 AM

#### **Capitol Visitor Center, Room SVC 209**

Fiber optic cables transmit digital data like phone conversations and streaming videos, but they also have a hidden talent: they can pick up vibrations from their surroundings. The miles and miles of fiber optic cables for telecommunications networks already installed in the U.S and around the globe can be repurposed into large-area seismic sensors. By tapping into the "dark fiber" in these cables that isn't used for telecommunication, seismologists gain a tool for studying everything from microearthquakes around oil and gas operations to monitoring permafrost changes that could impact infrastructure.

#### Please RSVP by June 13 to: policy@seismosoc.org

Breakfast will be served. Space is limited at this widely attended public event. Enter through the general Capitol Visitor Center entrance for access to the Senate side and Room SVC 209. Please allow 15 minutes for security check.

#### Herb Wang

University of Wisconsin- Madison

Herb Wang is an emeritus professor at the University of Wisconsin-Madison where he has been on the faculty since 1972 and where he received his B.A. in physics. He received his Ph.D. in geophysics at MIT. He was

department chair for three years and associate dean in the College of Letters and Science for ten years. He has been a program officer in the Department of Energy (1980–1981) and the National Science Foundation (2015–2017). Wang has supervised 15 Ph.D. students and received the campus Phi Beta Kappa Award for Distinguished Teaching in 2003. He is the author of two books and 100 scientific articles concerning geomechanics and hydrogeology. His current research focuses on enhanced geothermal systems and applications of fiberoptic sensing of seismic waves.

### PRESENTERS:

Nate Lindsay University of California, Berkeley

Nate Lindsey is a 4th year Ph.D. student at University of California, Berkeley in the Earth and Planetary Science Department and an affiliate at Lawrence Berkeley National



Laboratory. His research uses fiber-optic seismology to study earthquakes, permafrost thaw, and ocean waves offshore.

