

Earthquake or Explosion?: Seismology's Key Role in Nuclear Test Monitoring

Wednesday, March 21, 2018 from 9 to 10 a.m.

Capitol Visitor Center, Room SVC 215

When the earth shakes in North Korea or elsewhere, how do experts know whether the seismic waves signify an earthquake or a nuclear test explosion?

In this briefing, two top scientists will answer this critical question and share how seismologists analyze data collected from around the globe to determine the yield, location and other details about nuclear test explosions. They will also discuss how seismology contributes to the U.S. national interest in nuclear monitoring.

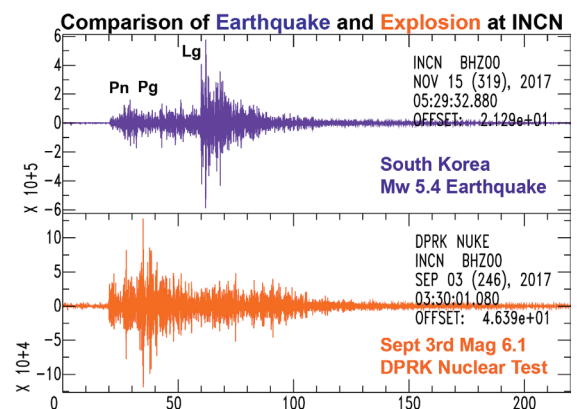
RSVP by March 16 at 5 p.m. EST to: policy@seismosoc.org

Breakfast will be served. Space is limited at this widely attended public event.

Please include any specific questions on the topic that you may like to have addressed at the event.

Enter through the general Capitol Visitor Center entrance for access to the Senate side and Room SVC 215.

Please allow 15 minutes for security check.



PRESENTERS:

William R. Walter

Lawrence Livermore National Laboratory (LLNL)

Walter is a research geophysicist at LLNL, where he leads the Geophysical Monitoring Programs (GMP). He also serves as the Chief Scientist for the Source Physics Experiments (SPE) Phase II Dry Alluvium Geology (DAG) chemical explosions planned to commence in spring 2018. He served on the Seismic Subcommittee for the National Academy of Sciences Panel that issued a 2012 report updating the technical issues related to the Comprehensive Nuclear-Test-Ban Treaty (CTBT). In graduate school he collected seismic data from U.S. nuclear tests in Nevada and from the 1988 Soviet Joint Verification Experiment (JVE) in what is now Kazakhstan. He is the author or co-author of more than 70 peer-reviewed scientific papers.



Thorne Lay

University of California, Santa Cruz

Lay is Distinguished Professor of Earth and Planetary Sciences at UCSC, where he has been located since 1990. Previously he was a faculty member at the University of Michigan, after receiving his Ph.D. in Geophysics from the California Institute of Technology in 1983. His research area is seismology and includes studies of large earthquake ruptures, internal structure of the Earth, and seismic monitoring of nuclear testing treaties. He is author of 451 research publications including five books, 319 publications in refereed books and professional journals, and 126 technical reports, book reviews, news items and conference proceedings. He received the Harry Fielding Reid Medal of the Seismological Society of America and the Inge Lehmann Medal and Macelwane Medal of the American Geophysical Union.

