# Integrating Science Needs with Advanced Seafloor Sensor Engineering to Provide Early Warning of Geohazards

## VISIONING WORKSHOP & ROADMAP FOR THE FUTURE

Sponsored by the National Science Foundation

# **July 12-13, 2018** Gleneden Beach, Oregon Salishan Resort

### **Objectives:**

- Integrate expertise of leading scientists and engineers to **advance seafloor sensor development** and widespread deployment over the next decade and beyond
- Develop **long-range plan for instrumenting the seafloor** to provide real-time data measuring dynamic deformation of the seafloor on multiple scales

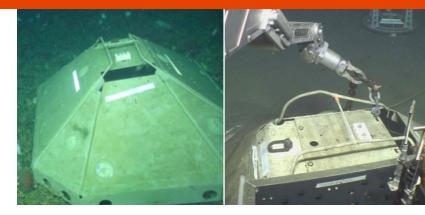
#### **Topics:**

- Development of **sensors** to measure seafloor deformation, temperature and fluid flow with high resolution over large areas
- Strategies for **transmitting data** from the sensors to land quickly and efficiently, including advanced in situ data processing and data compression algorithms
- Methods for **powering the stations** using energy derived from the environment

Note: A related workshop, the Future of Seafloor Science and Engineering (FUSE), will be held at Northeastern University in Boston June 21-22, 2018. Learn more: web.northeastern.edu/fuse.

For additional information or to request accommodations for disabilities, contact **Chris Parrish** at 541-737-5688 or Christopher.Parrish@oregonstate.edu.

Register: ctemps.org/announcement/seafloorinstrumentation-workshop-july-12-13-2018



### Focus Areas:

- Autonomous marine vehicles
- Bathymetric mapping
- Communications
- Computer science
- Geotechnical engineering
- Marine geology and geophysics

#### Organizing Committee:

Chris Parrish Ben Mason Anne Tréhu Oceanography

- Robotics
- Sensors
- Visualization

John Selker Eugene Zhang Geoff Hollinger

