

# CSU PHYSICS COLLOQUIUM

## “Seismological Exploration of the Solid Earth, Oceans, Cryosphere, and Atmosphere ”

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120 Engineering (Hammond Auditorium)

Monday, October 2nd at 4:00 PM

### **Abstract**

The science of seismology has both advanced and broadened in recent years, driven by vast new data sources, innovative methods, and growing science directions. Areas of exciting growth range from imaging Earth's deep inaccessible deep interior at unprecedented resolution to analyzing elastic wave signals associated with environmental processes and climate change. The ubiquity of coupled elastic and gravity wave energy in the regimes of the solid Earth, oceans, and atmosphere allows for a variety of integrative analyses, including processes associated with volcanic eruptions, global ocean wave energy, changes in Earth's cryosphere, and many other topics. I will briefly summarize the scope of seismological science and overview selected innovative directions that include research currently underway at CSU.

### **Biography**

I am a geoscientist with interests in geophysics, seismological imaging and source studies, and Earth processes encompassing earthquakes, volcanoes, glaciers, oceans, and geology. My and my students' research has drawn from significant seismological field studies in western North America, Italy, and multiple trips to Antarctica that include Erebus Volcano, West Antarctica, and South Pole. I have teaching and research interests in geophysical inverse and signal processing methods. My educational background is in Electrical Engineering, Physics, and Geophysics (B.S., M.S., University of Wisconsin) and Earth Sciences (Ph.D., University of California, San Diego) and I've served as the department head of Geosciences at CSU since 2014.

