

PHYSICS AND ASTRONOMY COLLOQUIUM

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"Applications of Physics to Earthquake Hazard Studies"

<u>Abstract</u>

Recent earthquakes around the world, including those in Haiti (M 7), Chile (M 8.8), New Zealand (M 6.1), and Japan (M 9) remind us of the devastating impact of earthquakes on society. The Haiti earthquake killed more than 300,000 people and the 2011 Japan earthquake had an economic impact of more than \$ 300 B and effected the global economy. However, it is important to note that the application of earthquake science (especially physics) and earthquake engineering through modern building codes, as well as public awareness, saved thousands and thousands of lives in Chile, Japan and New Zealand. Earthquake science has changed drastically over the past two decades. From the use of satellites in space to seismographs on the seafloor, this lecture will summarise some of the ways that modern earthquake science helps to protect society from the effects of earthquake science to national (and international) codes and standards, earthquake forecasting methods, and the development of earthquake early warning systems.

Wednesday, April 04, 2012 3:30 p.m. Bob Wright Centre Room A104