

Toward Muon Tomography in the Pacific Northwest of North America

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Abstract

The technique of cosmic ray muon tomography to image the interior structure of volcanoes, pioneered in Japan, has yet to be performed in the Western Hemisphere. Volcanoes threaten multiple populated areas in the Pacific Northwest, and it is important to establish observational monitoring, as well as to examine the unique geology of active structures in this region, through cosmic ray imaging. We have begun to use scintillating bar detectors to image structures, initially man-made ones such as buildings, in British Columbia, with the goal of imaging volcanic structures in Canada and the U.S. in the near-term future. Glyn Williams-Jones will discuss the motivation for these new measurements; and in this talk I will discuss some of our initial results.