

Towards a muon radiography of the Puy de Dome

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High energy (10^{11+} eV) atmospheric muons are a natural probe for geophysical studies. They can travel through hundreds to kilometers of rocks allowing for a radiography of the density distributions within large structures, the like mountains or volcanoes. A collaboration between volcanologists, astroparticle- and particle physicists, TOMUVOL, has been formed in 2009 to study tomographic muon imaging of volcanoes with high-resolution, large-scale tracking detectors. We report on two campaigns of radiographic measurements of the Puy de Dôme using Glass Resistive Plate Chambers (GRPCs) developed for Particle Physics R&D, within the CALICE collaboration.

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