



Towards Tomographic Imaging of the Puy de Dôme with GRPCs

Felix Fehr and the TOMUVOL Team
LPC, Clermont-Ferrand, France (fehr@clermont.in2p3.fr)

In 2009 the idea occurred of using Glass Resistive Plate Chambers (GRPCs) developed for high-energy physics calorimeters in order to perform tomographic imaging of volcanoes. A collaboration between volcanologists, astroparticle and particle physicists, TOMUVOL, has been founded to prove the feasibility of the new detection method by realizing a tomography of the French volcano Puy de Dôme with atmospheric muons.

A prototype telescope was deployed in January 2011 and led to first measurements of the atmospheric muon flux. The initial results as well as the expected performance of the full detector, derived from simulations, will be presented in this contribution.