

## **Impact of atmospheric flux and detection uncertainties on the muon imaging of large structures**

The quantitative interpretation of the imaging of large structures using the atmospheric muon flux depends on the details of the muon energy spectrum and angular distribution, on the model describing the interaction of the muons with the medium inside those structures, in particular the muon absorption and diffusion, as well as on the detector resolution. The impact of such parameters will be discussed on some results from GEANT4 simulations of a simplified 3D model of the Puy de Dome volcanic cone.

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