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## Recent updates on the DIAPHANE project of muon tomography

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Density radiography with atmospheric muons aims at determining the density variations or the absolute densities of geological or large volume bodies. The density is measured through the screening effect on the incident muons flux induced by the presence of matter, like for the X rays in a standard medical radiography. We will present recent updates on the DIAPHANE project which studies volcanoes with this technique since many years and is now deployed in the Lesser Antilles (Guadeloupe, Montserrat), Italy (Etna), the Philippines (Mayon) and in underground sites (France and Switzerland). Time-of-flight techniques have been developed to improve the data analysis and provide significant results.

キーワード: Volcanology, Muon tomography, Particles detector, Inverse problem  
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