

## The Diaphane project: readout design and telescopes upgrades

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The DIAPHANE project is dedicated to the density tomography of geological structures, focusing on active volcanoes like the ones in the Lesser Antilles belt. The aim of the project is to provide high resolution profiles, complementary to standard tomographic methods, to constrain the various evolution models of those volcanoes. In this talk we review the opto-electronics readout scheme of the telescopes used to measure the muon flux attenuation through the structures under study. We detail present state of the readout chain, based on solid scintillator and multi-anode PMT's and the current upgrades under development using MPPC and FPGA-embedded TDC technology.

**Auteurs principaux:** M. CARLUS, Bruno (CNRS); GIRERD, Claude (CNRS); M. MARTEAU, Jacques (Docteur); M. GARDIEN, Serge (CNRS)

**Orateur:** GIRERD, Claude (CNRS)

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