

From the Geosphere to the Cosmos: ASPERA Workshop

CV

Jacques MARTEAU
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Dr. J.Marteau is researcher in the fields of high energy physics and transverse applications in tomography imaging, currently involved in two large experimental programmes focused on the neutrino oscillations physics (OPERA and T2K), in the phenomenological theory of neutrino-matter interactions, in liquid argon TPC readout R&D and in muon tomography applied to geosciences (volcanology and geological inner structures characterization).

Permanent position (assistant professor) in the Université Claude Bernard Lyon-I

Research fields : high energy physics, experimental neutrino physics, neutrino-matter interactions theory, cosmic rays physics

Collaborations : **OPERA** (Oscillation Project with Emulsion tRacking Apparatus : experiment between CERN and the underground Gran Sasso laboratory) since 2000.

1st direct observation of neutrino oscillations candidate in 2009

Data acquisition project leader since 2002.

Member of the Executive committee of the collaboration.

T2K (Tokai to Kamiokande, Japan) since 2008.

Conception and production of a near detector to monitor the beam asymmetry

Instrumentation R&D : opto-electronics readout chains, scintillator detectors, large volume liquid argon TPC, development of large scale distributed data acquisition systems over Ethernet

2 patents deposited in the field of Ethernet-Based DAQ system (2003, 2008)

Transverse activities : medical imaging (micro-TEP developments)

muon tomography applied to geosciences (since 2008) : first observations on the Etna and La Soufrière de Guadeloupe in 2010
