



Laboratório de Instrumentação e
Física Experimental de Partículas

Seminário LIP

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11:30

Muography: from dreams to reality

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High energy atmospheric muons have high penetration power, making them particularly appropriate for imaging of large and dense structures. Additionally, robust, high resolution and large area trackers became available in the last fifteen years and the old ideas pioneered by George and Alvarez of imaging mountains and pyramids using muons are being now being implemented.

After a brief survey of muographic projects worldwide, I will concentrate on muography applications in volcanology and share what we learned after six years of experimentation on Puy de Dôme volcano in French Massif Central. Muography imaging is still at its beginning but we have now reason to believe that it can significantly improve the imaging of the inner structure of the volcanoes. Multi-probe data and reliable modelling should increase the accuracy of the risk assessment maps and reduce human and economic losses during eruptive episodes of volcanoes.

Local: Sala de Seminários (311)

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Café e bolinhos 30 min antes