



Identification and Characterization of the signal proceeded by muons in water Cherenkov detectors of the LAGO observatory (Latin American Giant Observatory)

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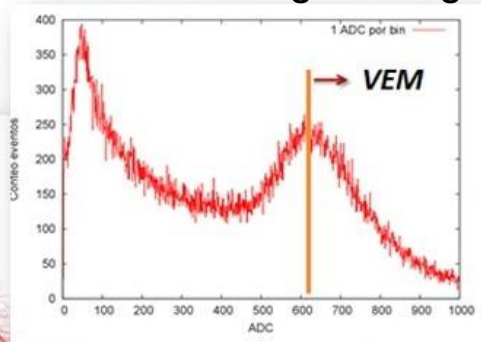
Department of Physics and Geology

Investigation Group integrar

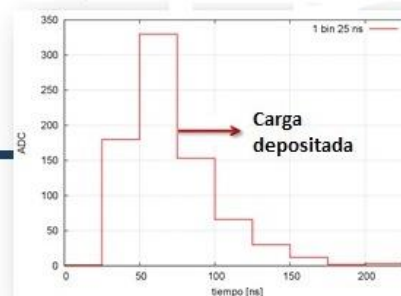
Semillero Investigación chitarero



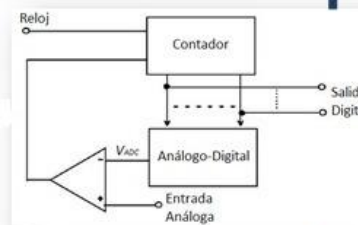
characteristic charge histogram



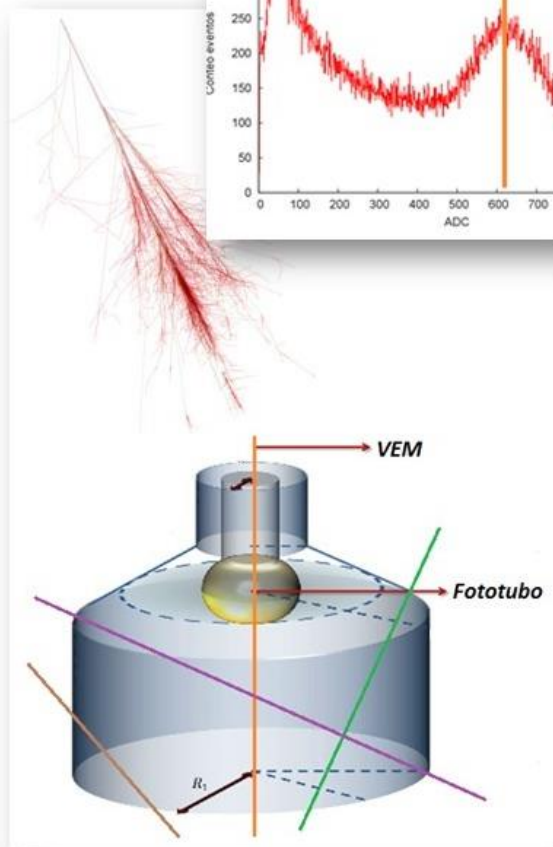
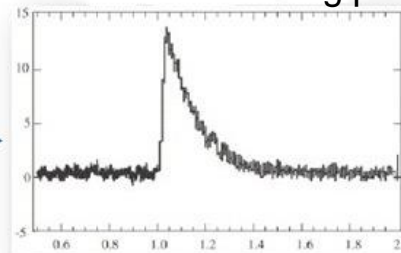
characteristic digitized pulse



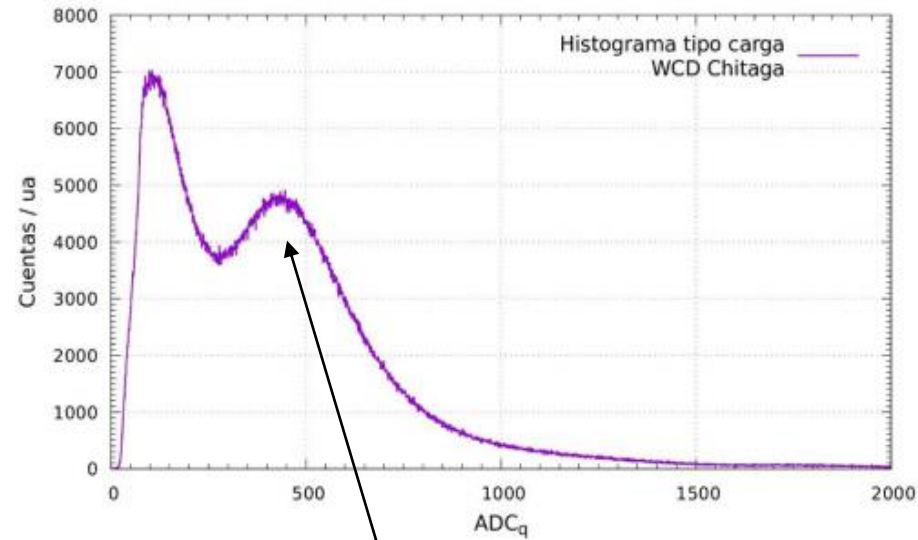
analog-digital
conversión



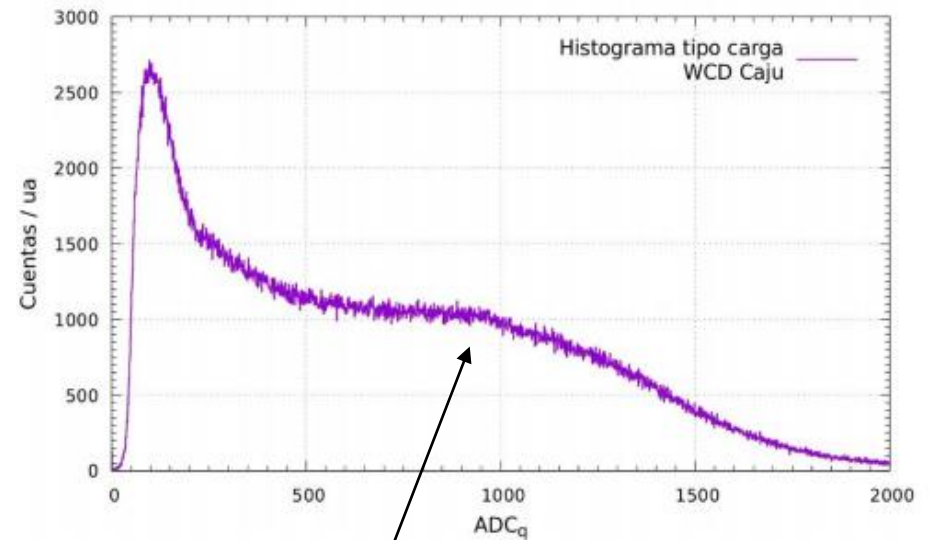
characteristic analog pulse



What The Problem?

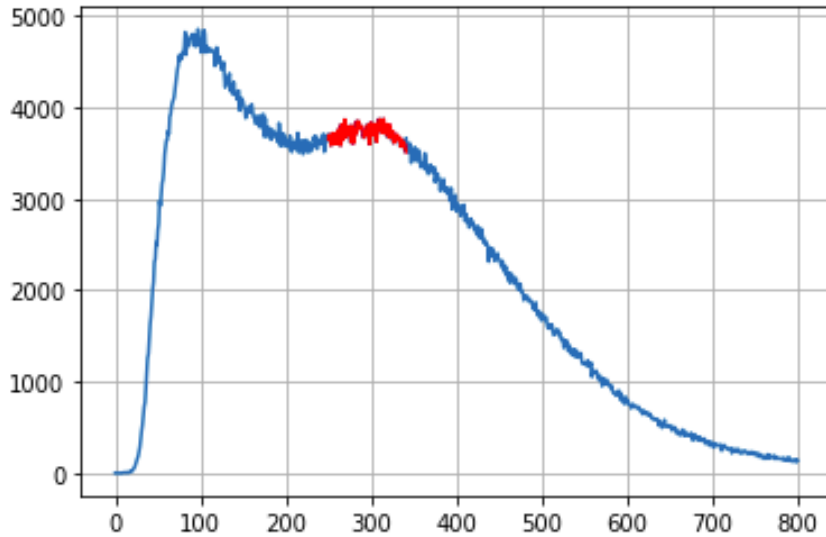


Defined Muon Hump



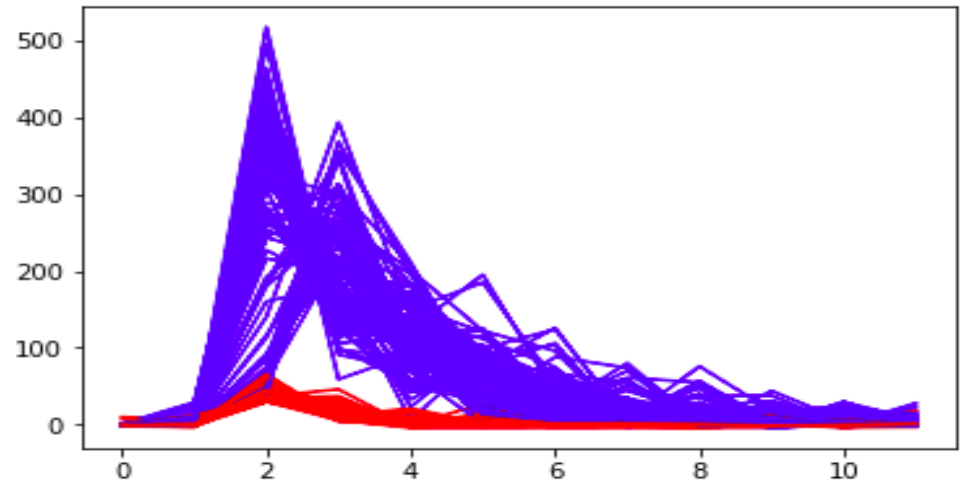
Hump Not Muon Defined

Preliminary Results

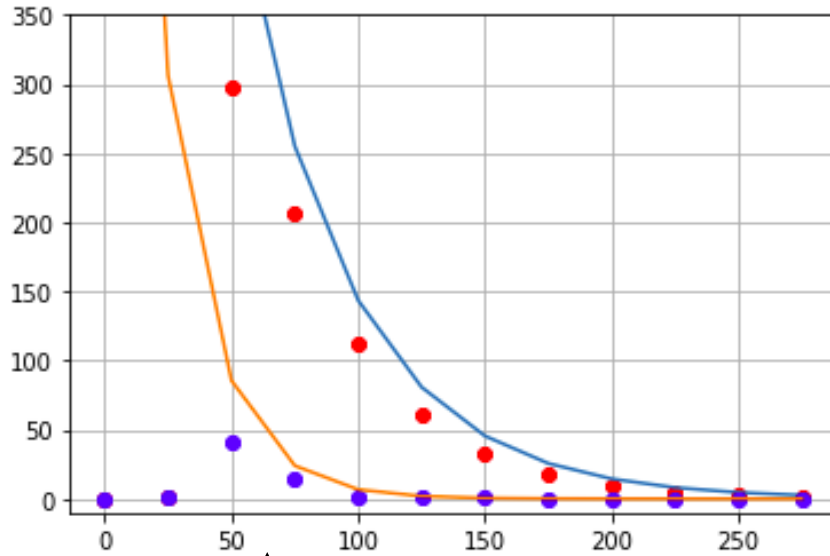


← Histogram charge

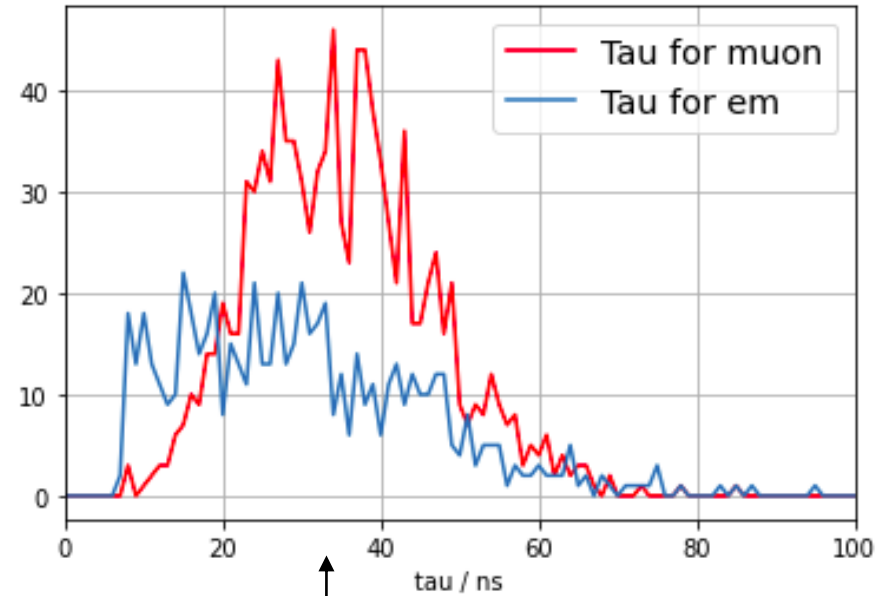
pulses →



Preliminary Results



Adjustment



Distribution

Remarks



- Obtain a physical parameterization of the signal produced by muon-type particles by the interaction with a LAGO observatory detector
- Design of an algorithm to identify the signal produced by muon-type particles in a LAGO observatory detector.
- Consolidate the University of Pamplona, and the Physics program, as institution that actively contributes to the development of the objectives scientists from the LAGO observatory

Thank
you

