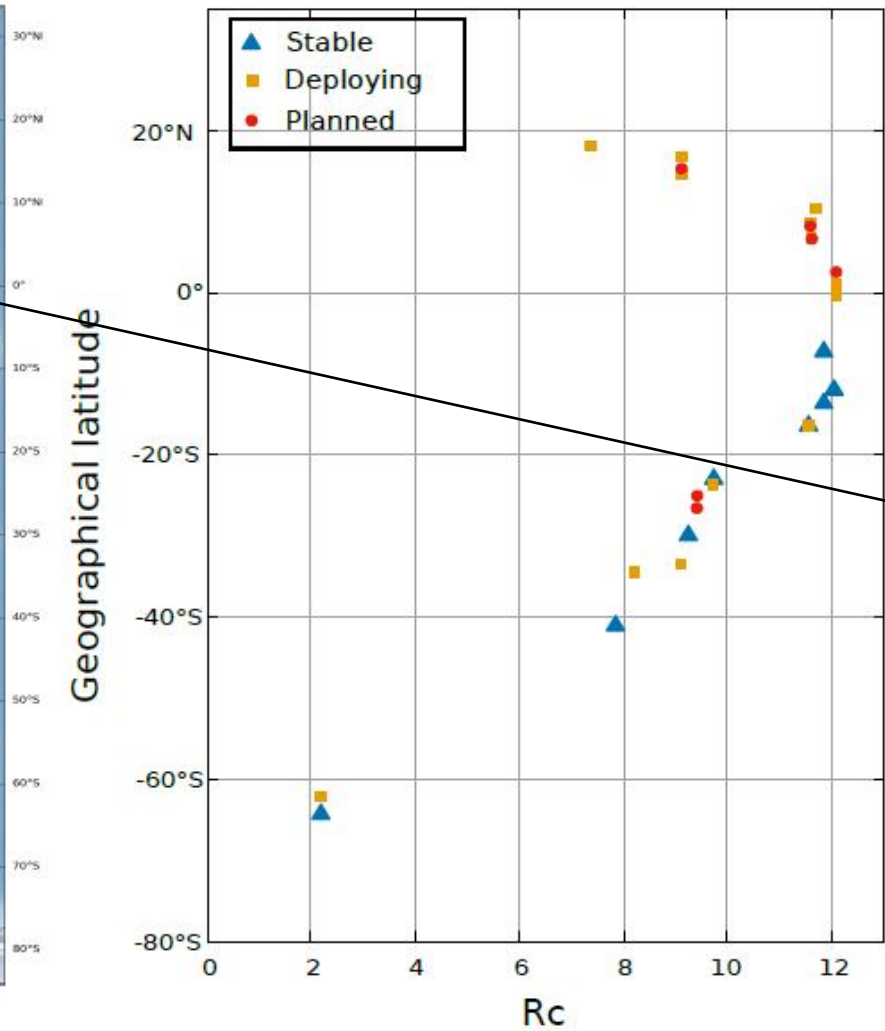


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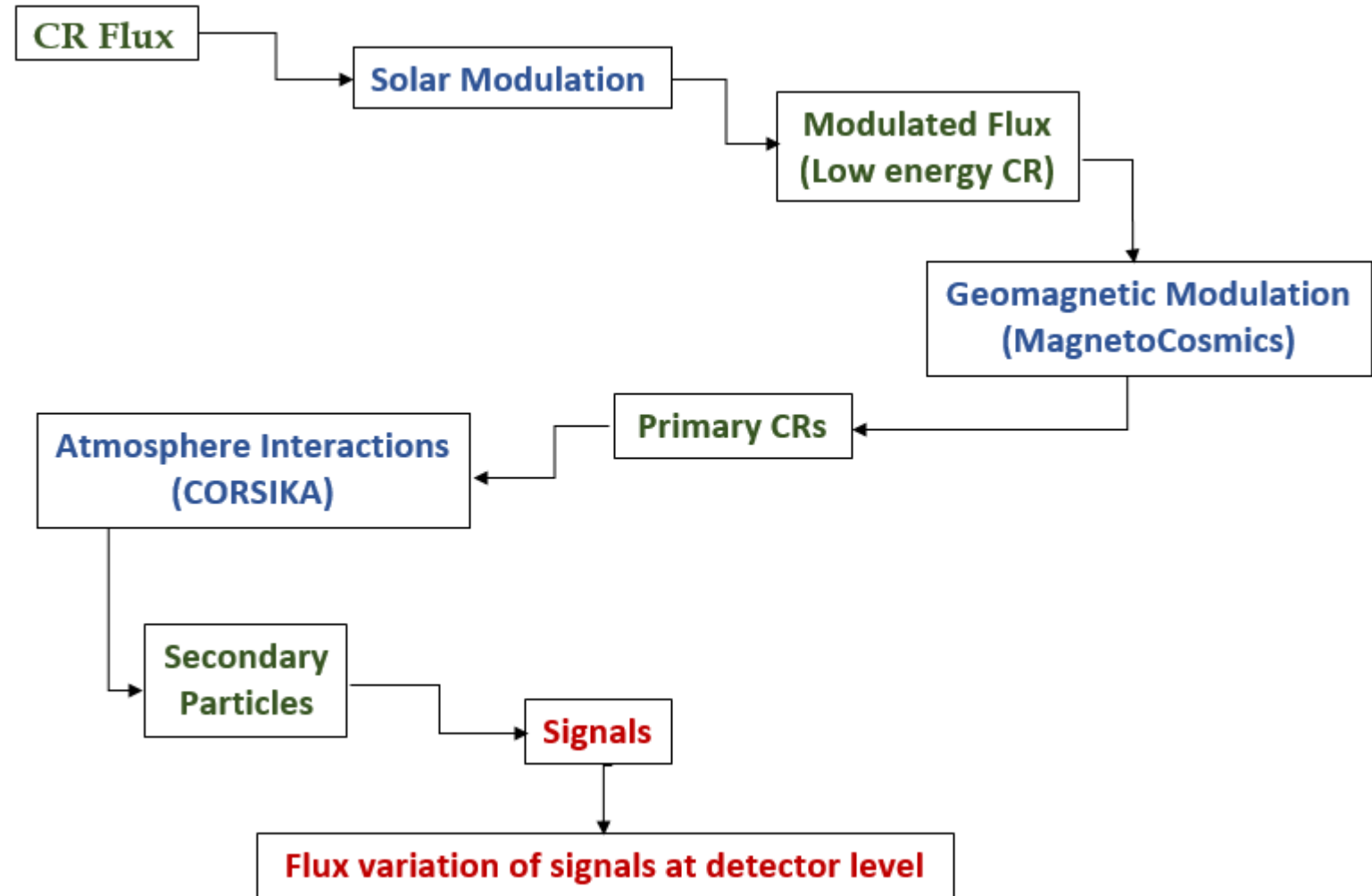
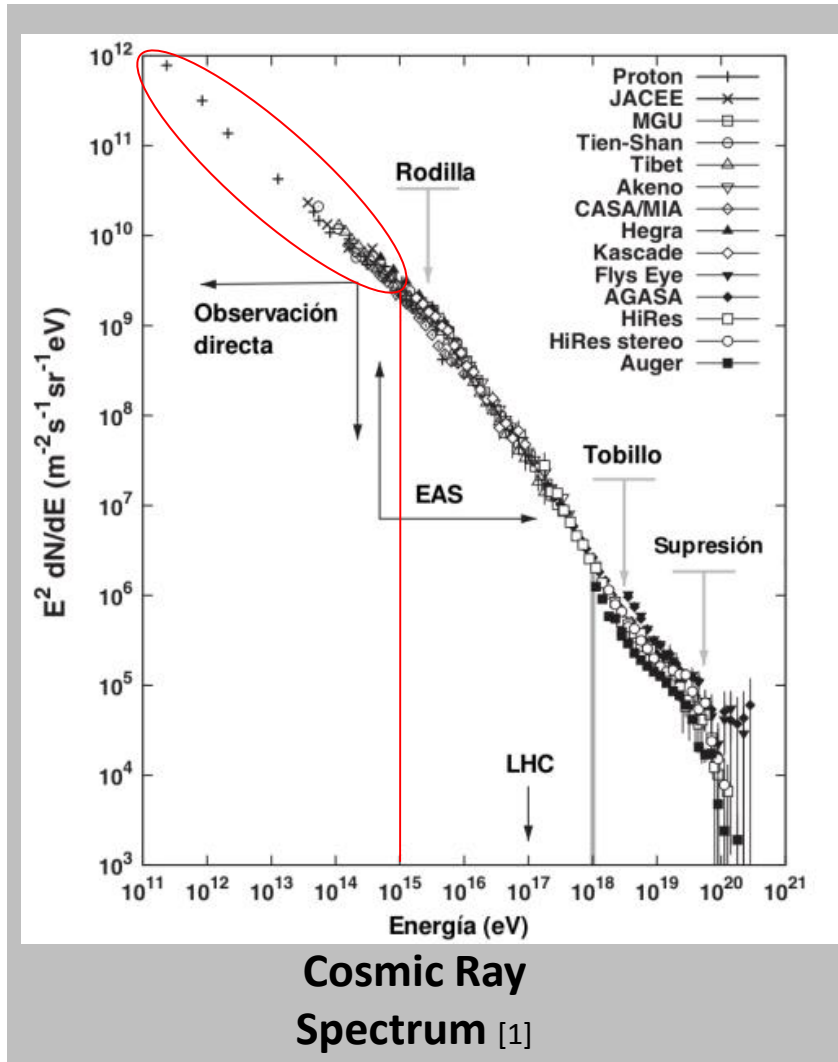
# Simulation of a Water Cherenkov Detector Response to the Background of Cosmic Rays at Pamplona Norte de Santander altitude (2300 m a.s.l.) for the LAGO Collaboration

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Co-Author: Mauricio Suárez Durán, Dr.  
Department of Physics and Geology  
University of Pamplona

# El Latin American Giant Observatory (LAGO)

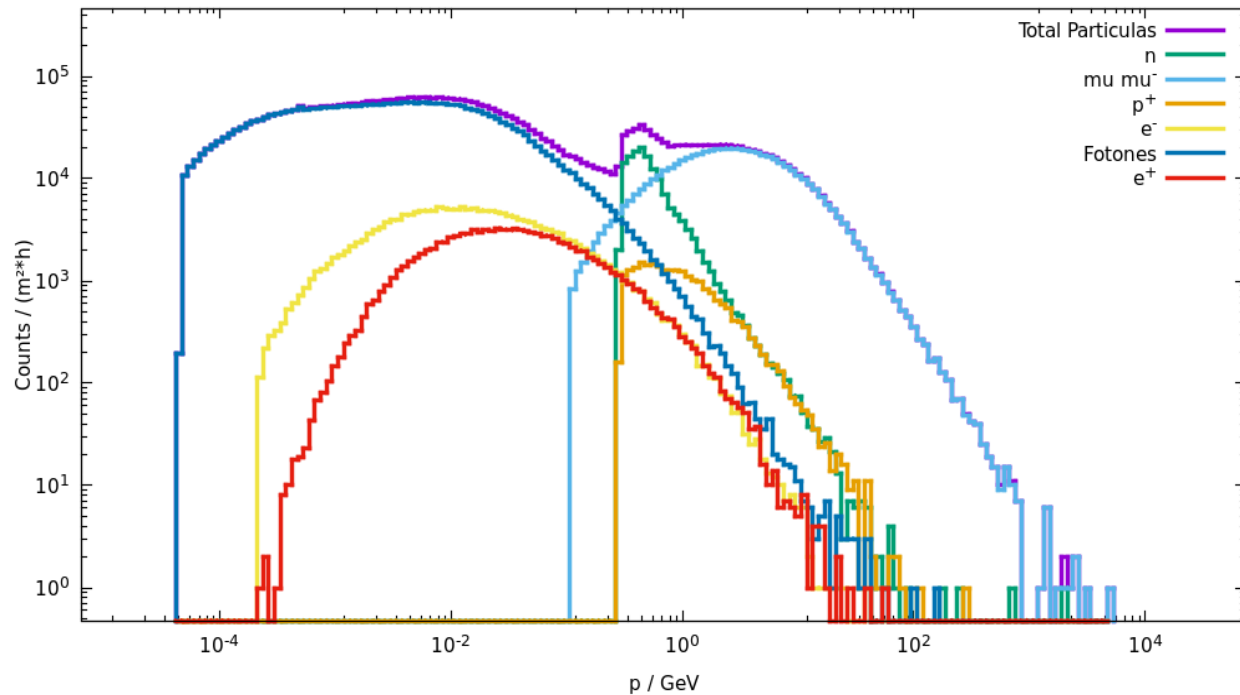


# METHODOLOGY



[1] Durán, M. S. (2015). Modulación de rayos cósmicos secundarios a nivel del suelo por cambios en el campo geomagnético (Doctoral dissertation, Tesis maestría, Universidad Industrial de Santander). Pg. 8

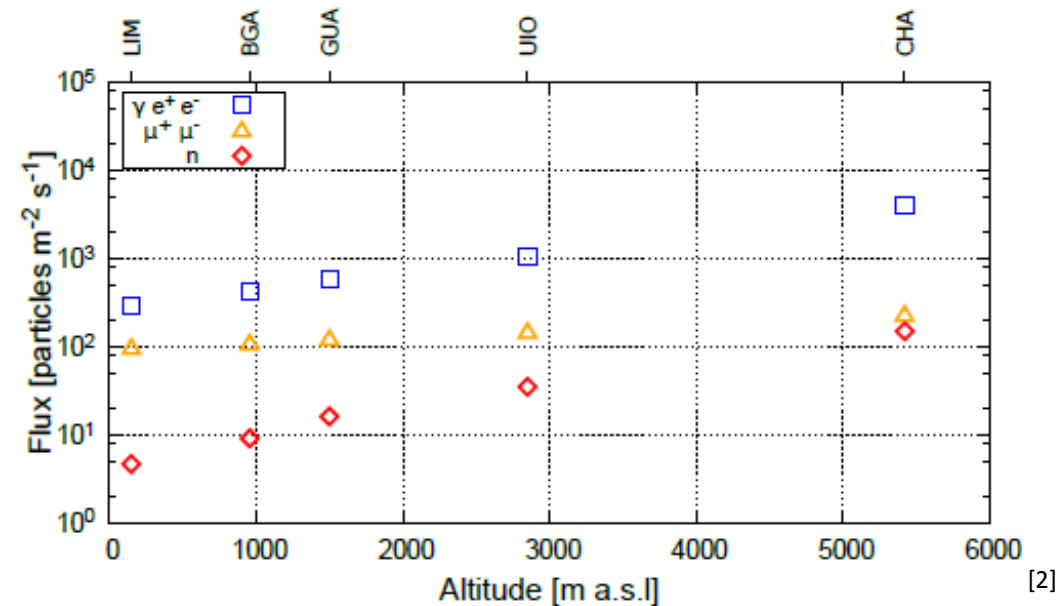
# Preliminary Results



Photons: 1128,03  $/(m^2*s)$   
 Muons: 149,85  $/(m^2*s)$   
 Neutrons: 40,58  $/(m^2*s)$

LAGO site	Alt [m a.s.l.]	$R_C$ GV/c	$\Xi^{All}$ [ $m^{-2} s^{-1}$ ]	$GE^{All}$ [%]
CHA	5240	11.6	4450	-17.7
UIO	2800	12.2	1260	-11.6
GUA	1490	9.1	730	-4.2
BGA	956	11.6	540	-5.9
SAWB	200	2.2	430	-0.4
LIM	150	12.0	390	-4.8
LSC	28	9.3	380	-2.6
EZE	10	8.2	390	-1.5

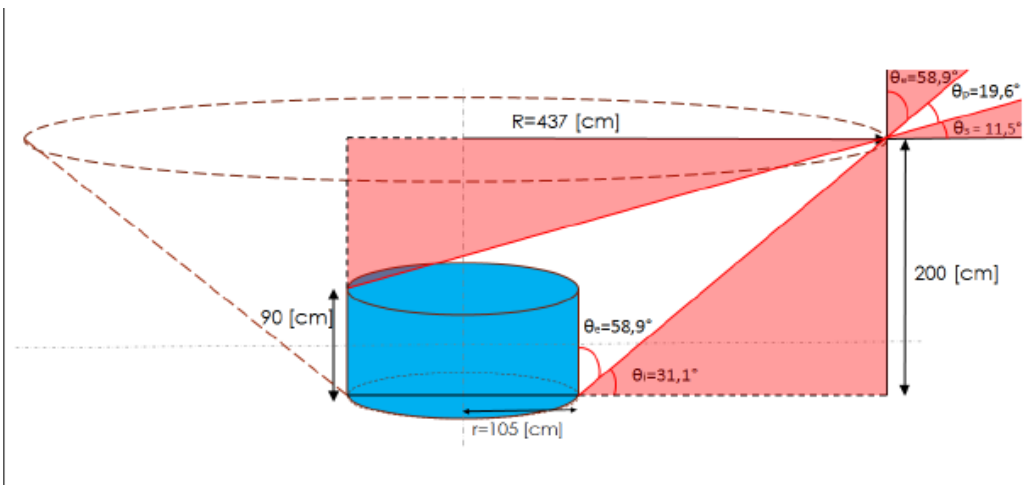
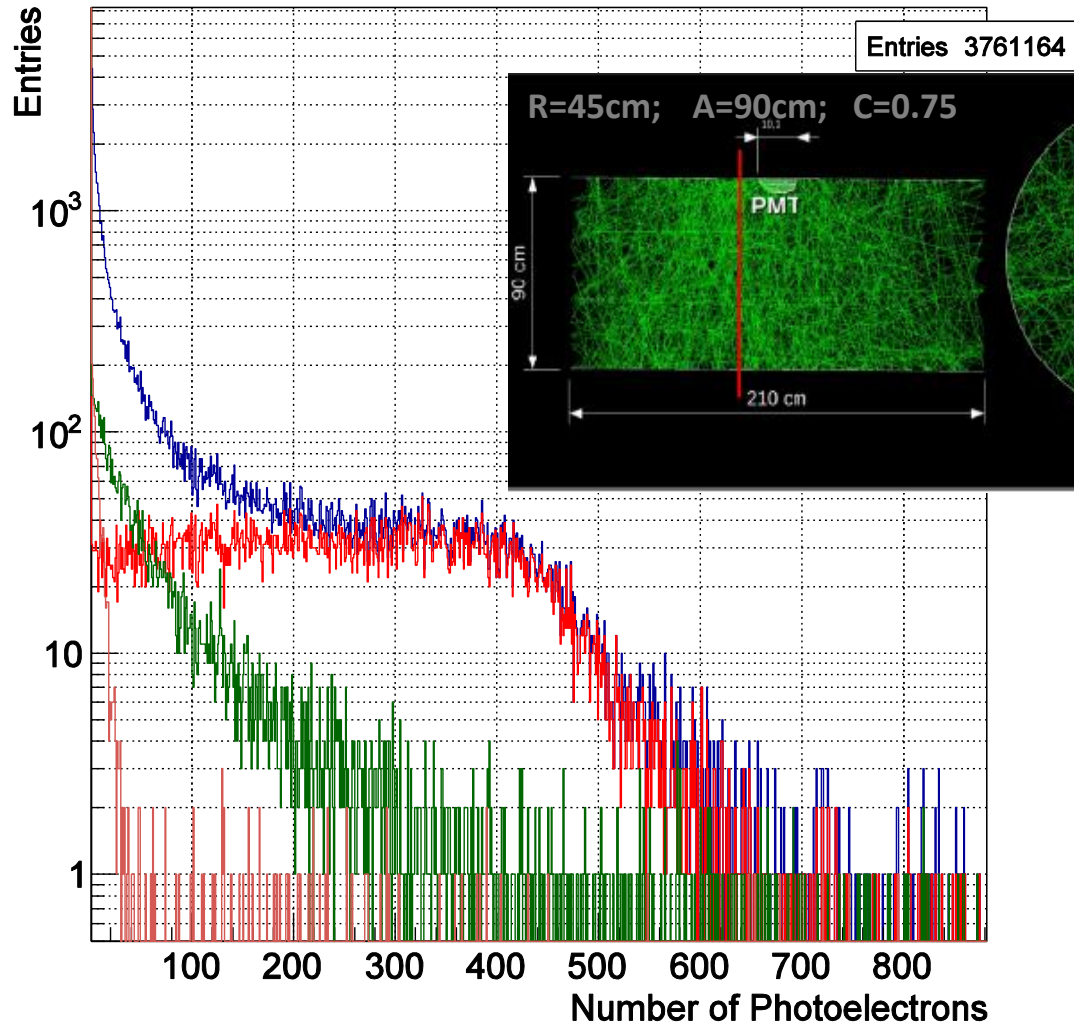
[2]



[2]



# Preliminary Results



[3]





**THANKS**

