



SEMINARIO



Área de Rayos Cósmicos

Título: INTRODUCTION TO THE SAMADHA PROJECT AND HIS BONNER SPHERE SPECTROMETER

Ponentes:

Dr. Luigi Russo INFN-LEMRAP Laboratory, Rome, Italy

Dr. Carlo Francesco Vigorito INFN-Turin University, Torino, Italy

Abstract: The SAMADHA (South Atlantic Magnetic Anomaly Dosimetry at High Altitude) is a project of environmental dosimetry funded by the Italian National Institute for Nuclear Physics (INFN) and ran in cooperation with the Instituto de Investigaciones Físicas of UMSA. The experiment is dedicated to the monitoring of the dose due to cosmic rays in high altitude areas in South America, inside the region of the "South Atlantic Magnetic Anomaly".

Two measurement sites at high altitude in Italy and in Bolivia are the experimental infrastructures of the project and include a common set of instruments for the ambient dosimetry. At the Testa Grigia Laboratory of the National Council of Research (CNR) at Plateau Rosa (3480 m) dosimetric data are collected as a term of comparison outside the SAA: it has been used as test facility for all the installed instruments at both sites.

Since winter 2022/2023 selected dosimetric detectors are in operation at Cosmic ray Laboratory of Chacaltaya (5240 m) including a Bonner Sphere neutron spectrometer with the aim to provide the measure of the local neutron spectrum and monitoring eventual modulations due to the solar activity.

This seminar will cover a general introduction to the SAMADHA goals, the overview of the Bonner Spheres detector and the first data outcome.

Lugar: Auditorio de la carrera de física

Día y hora: Viernes 24 de noviembre 12:00 pm

Transmisión en vivo: https://www.youtube.com/watch?v=i2ADgF4U_Vs

