

Università degli Studi di Pavia

DOTTORATO DI RICERCA IN FISICA

CORSO DI SEMINARI DI INDIRIZZO NUCLEARE

A.A. 2008/2009

Martedì 2 Dicembre 2008, alle ore 11 e alle ore 15 in Sala Riunioni INFN, la

Prof. Viviana Scherini

(Università di Wuppertahl)

terrà un ciclo di seminari su:

Results on Ultra High Energy Cosmic Rays with the Auger Observatory

Abstract:

The Pierre Auger Observatory is the world's largest instrument conceived to study the origin and nature of the highest energy cosmic rays, i.e. $E > 10^{18}$ eV.

The "hybrid" design combines the most advanced detection techniques in order to characterize the extensive particle showers induced by the cosmic primaries in the Earth atmosphere.

An array of 1600 water Cherenkov tanks (1500m spacing), deployed on an area of about 3000 m², is overlooked by 24 fluorescence telescopes, each with a field of view of 30x30 degrees, grouped in 4 buildings. Performances and results are reported, future plans are discussed.

Gli studenti del Dottorato, e gli altri interessati, sono cordialmente invitati ad intervenire.

Titolare del Corso

Prof. Sergio P. Ratti