

LABORATORI NAZIONALI DEL GRAN SASSO

SEMINAR ANNOUNCEMENT

On **April 2, 2009**, at **2:30 pm**, **P. Salucci** from **SISSA, Trieste**, will give a seminar entitled:

“The mass distribution in Galaxies”

Abstract

In the past years a wealth of observations has unraveled the structural properties of the Dark and Luminous mass distribution in galaxies. These have pointed out to an intriguing scenario not easily explained by present theories of galaxy formation. The investigation of individual and coadded objects has shown that the spiral rotation curves follow, from their centers out to their virial radii, a Universal profile (URC) that arises from the tuned combination of a stellar disk (spheroid) and a dark halo. The importance of the latter decreases with galaxy mass. Individual objects, on the other hand, have clearly revealed that the dark halos encompassing the luminous discs have a constant density core. This resulting observational scenario poses important challenges to presently favored theoretical Λ CDM Cosmology.

(“B. Pontecorvo” room)