



DIPARTIMENTO DI FISICA "E.Fermi"
UNIVERSITÀ DI PISA
CORSO DI DOTTORATO IN FISICA
VIA BUONARROTI,2 - Edificio B-C
56127 PISA - ITALY

CORSO DI DOTTORATO IN FISICA

Avviso di Seminario

Martedì 9 dicembre 2003

ore 16:00

Dipartimento di Fisica

Via Buonarroti, 2

Sala Seminari (248) - Ed. C - I piano

Prof. Oscar Straniero

Ist. Nazionale di Astrofisica

Osservatorio di Teramo

terrà un seminario su:

"Supernovae in different stellar populations"

Abstract: Type Ia supernovae are commonly considered reliable standard candles and, due to their brightness, they provide distances of high redshift Galaxies (up to z about 1). Thus, the recent detection of high redshift SNe Ia showed that the expansion rate of the Universe is accelerating.

Distance determinations are actually based on the relation between the maximum luminosity of SNe Ia and the shape of their light curve. This relation is empirically calibrated on a database of well studied SNe in nearby Galaxies. Then a question arises about the similarity of nearby and high redshift supernovae. We compare theoretical light curves of SNe Ia with progenitors of different masses and/or chemical compositions. In this way, we evaluate the changes of the observed light curves due to differences of the original stellar population in the host Galaxy.