



Università degli Studi di Cagliari
Dipartimento di Fisica



Istituto Nazionale di Fisica Nucleare
Sezione di Cagliari
High Energy Theory
Group

Avviso di Seminario

Martedì 13 dicembre 2005
h. 16:00 – Aula C, Dipartimento di Fisica

Dr. Alessandro Drago
Università e INFN - Ferrara

Gamma ray bursts and the transition to quark matter in compact stars

I will present a model in which long GRBs are originated by the transition from a purely hadronic star to a star made, at least in part, of deconfined quark matter. I will discuss the possible signatures of the model, namely a) the possible existence of two compact stars having similar masses but rather different radii; b) the possible time-delay between the SN explosion and the GRB, with the SN preceding the GRB; c) the possibility of explaining GRBs in which active periods are separated by quiescent times lasting sometimes hundreds of seconds.

