



# Avviso di Seminario

Il giorno giovedì 10 marzo 2011 alle ore 15,30 presso l'area  
della ricerca del CNR di Pisa,  
Aula 44, primo piano, Edificio "A"

**il Prof. Sergei V. Bulanov**

*Kansai Photon Science Institute, JAEA, 8-1-7 Umemidai, Kizugawa,  
Kyoto, 619-0215, Japan*

terrà un seminario dal titolo:

## **Relativistic Mirrors in Laser Plasmas – a Path towards Compact Source of Coherent X-Rays**

**Abstract:** In laser plasmas, the relativistic flying mirrors are thin and dense electron or electron-ion layers accelerated by the high intensity electromagnetic waves up to velocity close to the speed of light in vacuum. The reflection of the electromagnetic wave at the relativistic mirror results in its energy and frequency change due to the double Doppler effect. This scientific area promises the development of the sources of ultrashort x-ray pulses with the parameters required for studying of complex structures in nanometer scale and in attosecond range.

Antonio Giulietti