



## Avviso di Seminario

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25-11-2015, Ore 15:00 - Sala Riunioni Terzo Piano

**Viacheslav Duk**

*Infn Perugia*

*Terrà un seminario dal titolo:*

***COSMOLOGY IN RARE KAON DECAYS: EXPERIMENTAL TESTS AT THE “INTENSITY FRONTIER”***

**Abstract:**

One of the main directions in modern particle physics is the so called “intensity frontier”, where experimental physicists search for New Physics beyond the Standard Model by observing rare phenomena in experiments with high intensity beams. The new generation on-going experiments with kaons aim at reaching unprecedented sensitivity  $O(10^{-12})$ . This precision allows to test various New Physics models that could shed light on the observed cosmological phenomena: dark matter, baryon asymmetry of the Universe, inflationary expansion of the early Universe. In this seminar we discuss models with heavy neutrinos, dark photons and light inflatons that can be tested in kaon decays. Results on the most recent measurements based on charged kaon data will be presented as well as the sensitivity estimations for the NA62 experiment at CERN.

Il Direttore  
**Maurizio Maria Busso**