

### Colloqui Classe di Scienze

#### Mercoledì 16 maggio 2012

ore 15.00

Scuola Normale Superiore
Pisa
(Sala Azzurra)

# Valery Rubakov

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Terrà un seminario dal titolo:

# "Cosmology and the Large Hadron Collider"

#### Abstract:

The Large Hadron Collider aims at revealing physics at exceedingly high energies and short distances: these are energies in the TeV range and distance scales shorter than 10–17 cm. In the cosmological context, this physics is responsible for the properties of the cosmic medium in the very early Universe at temperatures exceeding 1015 degrees Kelvin, which correspond to times less than 10–10 second after the Big Bang. It is conceivable that this was the epoch of the generation of dark matter and/or matterantimatter asymmetry of the Universe. Thus, the LHC may well shed light on these long-standing cosmological problems. The purpose of this talk is to discuss these issues, as well as other potential implications of the discoveries in particle physics for our understanding of the Universe.

Tutti gli interessati sono invitati a partecipare

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