



Venerdì 18 Novembre
Sala Wataghin, ore 15:00

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Particles in astrophysics and cosmology: a dark connection

The particle physics interpretation of the dark matter problem, which is intimately of cosmological and astrophysical nature, is going to be posed under deep scrutiny in the next years. From the particle physics side, the LHC will deeply test new physics beyond the Standard Model, where particle candidates of dark matter are predicted to exist. From the astrophysical side, many probes are already providing a great deal of independent information on the foreseen signals which can be produced by the galactic or extra-galactic dark matter.

Cosmology plays a central role in determining the relevance of the particle dark matter candidate.

In this colloquium, I will discuss the current status and the future prospects of particle dark matter searches, both of direct and indirect nature, and their links with searches of new physics at accelerators.