## 6th Rome Joint Workshop: Weird Theoretical Ideas



ID contributo: 1

Tipo: non specificato

## Higgsplosion, Higgspersion and Naturalness

lunedì 18 dicembre 2017 11:30 (1 ora)

Higgsplosion is a dynamical mechanism that introduces an exponential suppression of quantum fluctuations beyond the Higgsplosion energy scale and further guarantees perturbative unitarity in multi-Higgs production processes. I will review the calculations that indicate a factorial growth of the h\* -> n h transition amplitude and will outline how such a growth leads to an exponential suppression of large particle virtualities. If realised in nature, Higgsplosion has astonishing consequences for the consistency of the Standard Model. I will discuss these consequences and will present phenomenological implications that could potentially lead to observation of Higgsplosion in future experiments.

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