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## Accidental matter at the LHC

*Tuesday 7 April 2015 17:39 (23 minutes)*

In this talk I will discuss weak-scale extensions of the Standard Model which automatically preserve the accidental and approximate symmetry structure of the Standard Model and which are hence invisible to indirect low-energy probes. By requiring the consistency of the effective field theory up to scales of  $\Lambda_{eff} = 10^{15}$  GeV and after applying cosmological constraints, there is only a finite set of possibilities left. One of the most striking signatures of such a framework is the presence of new charged and/or colored particles which are stable on detector scale.

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