## New Frontiers in Theoretical Physics - XXXV Convegno Nazionale di Fisica Teorica and GGI 10th anniversary



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## Weakly coupled baryonic dark matter

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In this talk I will describe Dark Matter (DM) arising as a composite state of a new confining gauge force and stable thanks to accidental symmetries, as recently proposed in the context of theories with new vector-like fermions. Differently from previous works, I will focus on the regime where the fermion masses are larger than the confinement scale. In this scenario DM is a baryonic non-relativistic bound state formed due to perturbative forces. I will consider both DM as a Majorana and as a Dirac fermion leading to completely different phenomenology. Due to the perturbative value of the gauge coupling the thermal relic abundance can reproduce the critical DM density for masses around the TeV scale, possibly also accessible by the LHC.

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