Contribution ID: **230** Type: **not specified**

Astrophysical Phenomenology of Colored Higgs Triplet

Tuesday 4 June 2024 17:40 (20 minutes)

The color-triplet partner of the Higgs doublet is a model-independent prediction of grand unification.
It has been shown some time ago that this particle can be much lighter than the GUT scale, all the way
to TeV mass range, and correspondingly very long lived. In this presentation we concentrate on a stable $(\tau > t_{universe})$
triplet and investigate its astrophysical and phenomenological implications. In particular, we explore the possibility that
their color-singlet bound states with ordinary quarks can be dark matter. We discuss how the triplet affects the history of
our universe and where it might hide today (core of planet/stars or daily-life matter).

Primary authors: DVALI, Gia; ETTENGRUBER, Manuel; JANKOWSKY, Anna (University of Munich (LMU))

Presenter: JANKOWSKY, Anna (University of Munich (LMU))

Session Classification: Parallel Session PI.7