



Contribution ID: 27

Type: **Talk**

Exotic Particles at LHC and Future Colliders

Monday 18 December 2023 17:00 (30 minutes)

The Large Hadron Collider (LHC) has already put very strong limits on the Beyond Standard Model particle masses. In most of the LHC searches, it is commonly assumed that these exotic particles are directly produced at the colliders or they decay directly to the Standard Model particles. But, theories such as the Pati Salam Model, Composite Higgs and Little Higgs scenarios suggest that the interaction among different exotic particles can exist, which in turn reveals exciting new signatures. Due to the long decay chain, large number of particles are present at the final state. As a result, the search processes at the collider become challenging. In this talk, I will discuss the discovery and exclusion aspects of such alternative searches at the Large Hadron collider and future colliders such as International Linear Collider and Muon Collider.

Designation

Faculty

Reference publication/preprint

<https://arxiv.org/abs/2112.09451>

Institution

Centre for Cosmology and Science Popularization, SGT University

Author: KUMAR, nilanjana

Presenter: KUMAR, nilanjana

Session Classification: Plenary