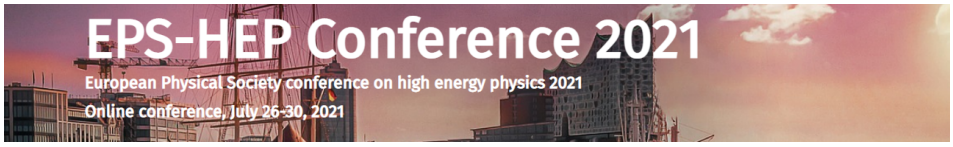

Contribution ID: **926** Type: **Parallel session talk**

Constraining electroweak and strongly charged long-lived particles with CheckMATE

Tuesday, 27 July 2021 16:45 (15 minutes)

Long-lived particles have become a new frontier in the exploration of physics beyond the Standard Model. In this paper, we present the implementation of four types of long-lived particle searches, viz. displaced leptons, disappearing track, displaced vertex (together with muons or with missing energy), and heavy charged tracks. These four categories cover the signatures of a large range of physics models. We illustrate their potential for exclusion and discuss their mutual overlaps in mass-lifetime space for two simple phenomenological models involving either a U(1)-charged or a coloured scalar.

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Collaboration / Activity

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