

Z Portal to the Dark Sector Through Z' Mediation

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The exotic Z decays to a QCD-like dark sector provide unexplored opportunities at colliders. In this talk, we explore the region where the Z portal is generated via the mixing with a dark Z'. The phenomenological signatures of light Z' are studied, with both dark shower signals in Z(Z') decays and exotic decays of B hadrons taken into account. The generated dark hadrons may serve as long-lived particles and leave their footprints at colliders.

Primary authors: Dr SALVIONI, Ennio (U. Padua); CHENG, Hsin-Chia (University of California, Davis); LI, Lingfeng (Brown University); Mr JIANG, Xuhui (The Hong Kong University of Science and Technology)

Presenter: Mr JIANG, Xuhui (The Hong Kong University of Science and Technology)

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