

## Search for Hidden Valleys Signatures with the D0 Detector

We present results of searches for unique experimental signatures that might arise from a hidden sector extension (hidden valley) of the standard model. Reduced couplings to the hidden sector can result in long-lived particle decays that result in highly displaced vertices from di-leptons or di-jets. By searching for such signatures, D0 extends its discovery potential into previously unexplored phase space.

**Primary authors:** JUSTE, Aurelio (Fermilab); SOLDNER-REMBOLD, Stefan (University of Manchester)

**Presenter:** SOLDNER-REMBOLD, Stefan (University of Manchester)

**Track Classification:** Poster session