

Isosinglet vectorlike leptons at e^+e^- colliders

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We study weak isosinglet vectorlike leptons that decay through a small mixing with the tau lepton, for which the discovery and exclusion reaches of the Large Hadron Collider and future proposed hadron colliders are limited. We show how an e^+e^- collider may act as a discovery machine for these τ' particles, demonstrate that the τ' mass peak can be reconstructed in a variety of distinct signal regions, and explain how the τ' branching ratios may be measured.

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