

Quirks at the Forward Physics Facility

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Quirks are a generic prediction of strongly-interacting hidden sectors with low Λ . Such particles can be produced in large numbers at the LHC with high initial p_T , but since they are tied together by a color string, the quirk–anti-quirk system has vanishing total p_T and so propagates down the beam pipe into forward detectors. We show that quirks produce a spectacular signature of two simultaneous, slow or delayed, charged tracks, allowing FPF detectors to probe deep into quirk parameter space

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