7th ComHEP: Colombian Meeting on High Energy Physics



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Quarkophobic W' for LHC searches

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We consider a simplified model where a W' boson is added to the standard model with negligible couplings to quarks, but generic couplings to leptons and electroweak bosons. We study the implications of such a model for LHC searches. Consequently, we propose an LHC search through the vector boson fusion topology which would have sensitivity for such a new particle with the current proton-proton collisions's energy and available luminosity.

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