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Missing-ET insensitive search for new physics such as R-parity Violation with multileptons

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Anticipating a data sample of the order of hundreds pb^{-1} at a collision energy of 7 TeV by the CMS experiment at LHC in 2011, we probe new physics such as matter symmetry violation in the leptonic sector in theories with partner articles with a signature of three or more leptons in the final state. The search is organized to minimize reliance on specific kinematic variables to reduce SM backgrounds and we illustrate it by application to R-parity violating scenarios of new physics which are not necessarily accompanied by missing ET. We also estimate Standard Model backgrounds for individual channel with a maximal use of data-based methods to avoid reliance on simulation.

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