

Search for Heavy Stable Charged Particles in CMS

New studies of the CMS collaboration are presented on the sensitivity to searches for Heavy Stable Charged Particles (HCSFs). Such particles appear for example in particular SUSY and extra dimension models. Making use of the redundancy of the CMS experiment to measure the velocity of such heavy particles while traversing the detector, excellent prospects for the discovery of these particles -should they exist- can be demonstrated. These studies are based on detailed detector simulation, including all Standard Model backgrounds. Particular emphasis is given to possible early discoveries, ie with 100 pb⁻¹ or less. Projected 95% CL exclusion limits as function of luminosity are presented as well.

Primary author: WYSLOUCH, Boleslaw (MIT)

Presenter: KAZANA, Malgorzata (CMS group)

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