

How light can sleptons be?

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Abstract

Several searches for production of sleptons has been performed in collider experiments such as the currently running LHC its predecessor LEP. In this article we investigate the limits on the slepton mass(es) set by these experiments, with special emphasis on how light sleptons are allowed to be with the current limits. We also take a look at the models used in these searches, how these compare to the MSSM, and how the limits from these searches can be related to the sleptons in the MSSM.

1 Introduction

2 Searches with LEP

3 Searches with LHC

References

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- [3] P. Richardson, hep-ph/0101105.