

## Abstract

A clean signal for discovering SUSY is the decays of SUSY particles into two like-sign electrons. The main backgrounds for this channel come from fake electrons and electron charge misidentification. In a full electronic decay of  $t\bar{t}$  events, if the charge of one of the electrons can't be measured correctly, then it will be a background for SUSY events in this channel. In this talk, I'm going to first develop a method to measure the probability of charge mismeasurement and then try to use it for estimating the number of  $t\bar{t}$  events which enter the same-sign event selection wrongly.