

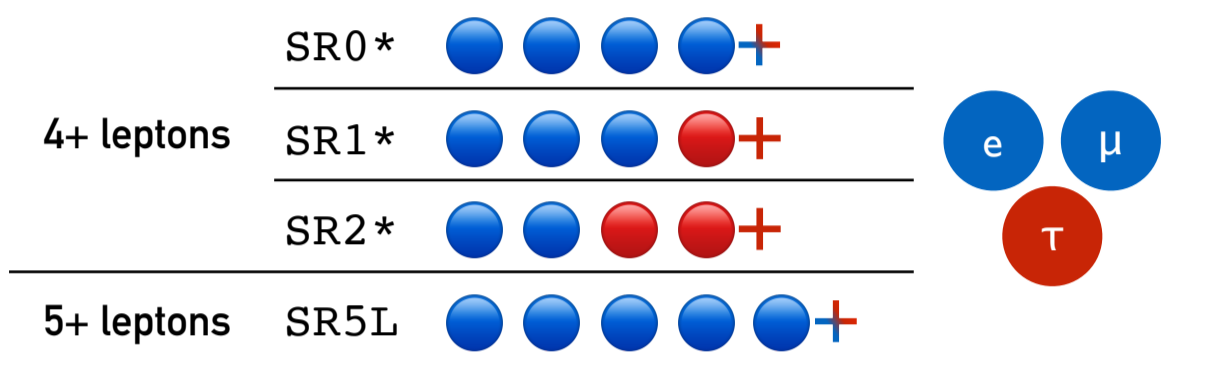
Looking for SUSY in events with 4 or more leptons at the ATLAS experiment

Gabriel Gallardo (Oxford) for the ATLAS Experiment
 Based on ATLAS-CONF-2020-040
<https://cds.cern.ch/record/2727861>

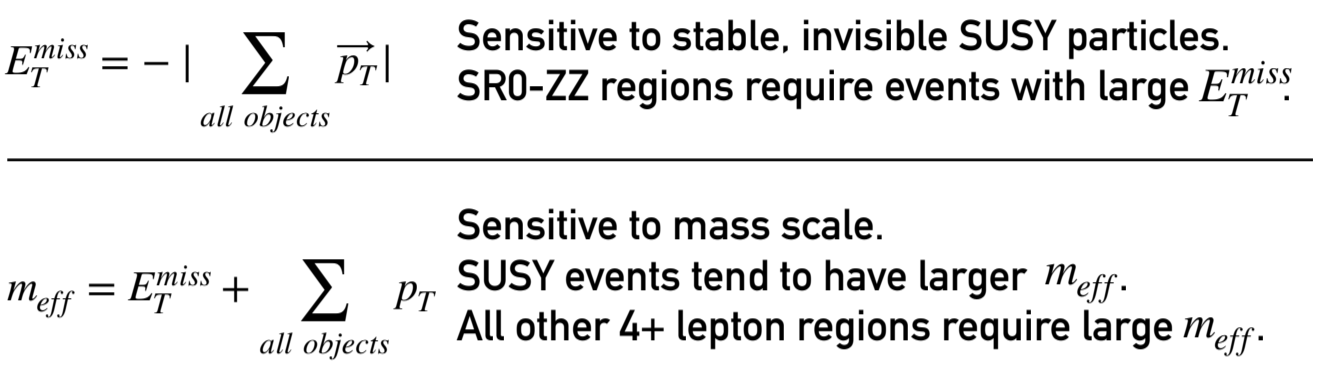


SIGNAL REGION DESIGN

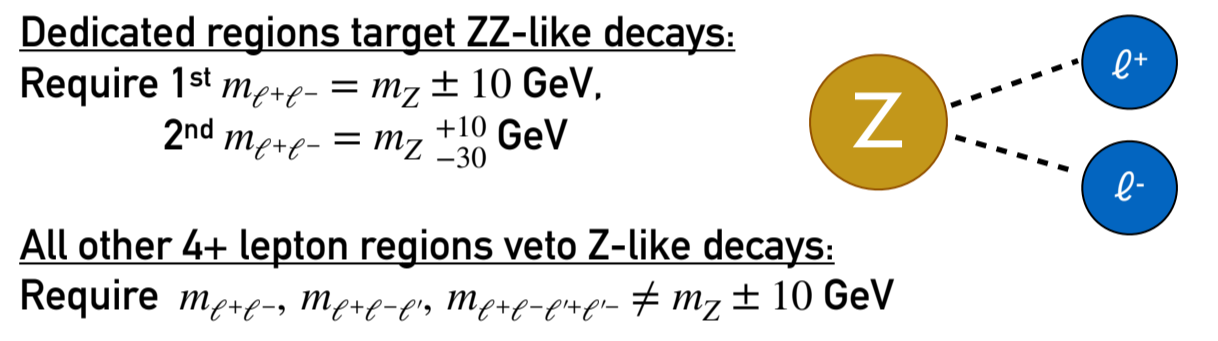
STEP 1) Select 4+ Leptons



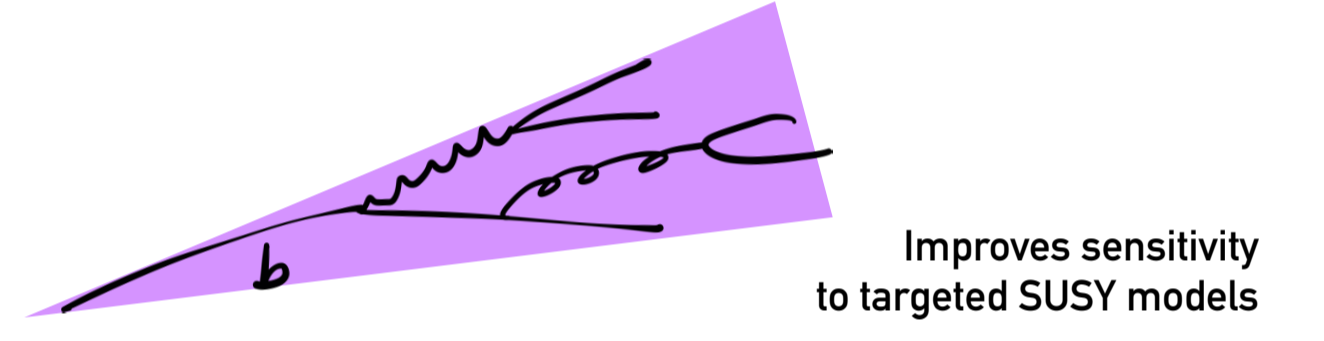
STEP 3) Requirements on key variables



STEP 2) Consistency with Z boson

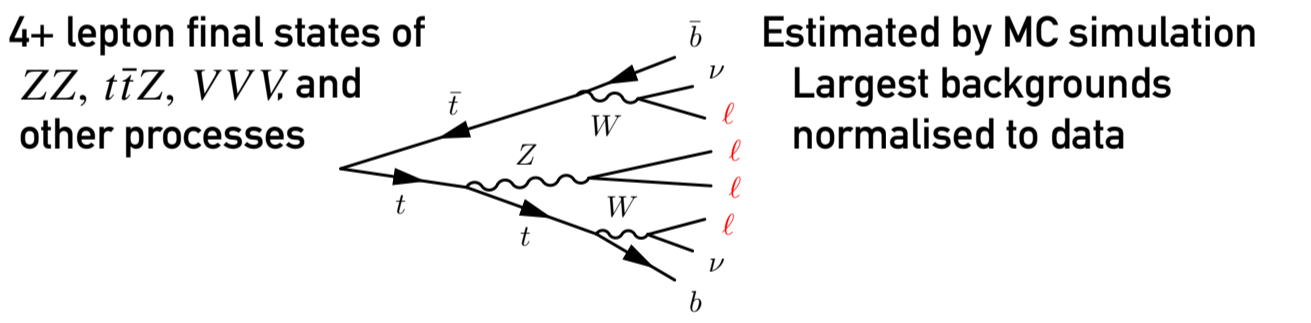


STEP 4) Require or veto b-tagged jets

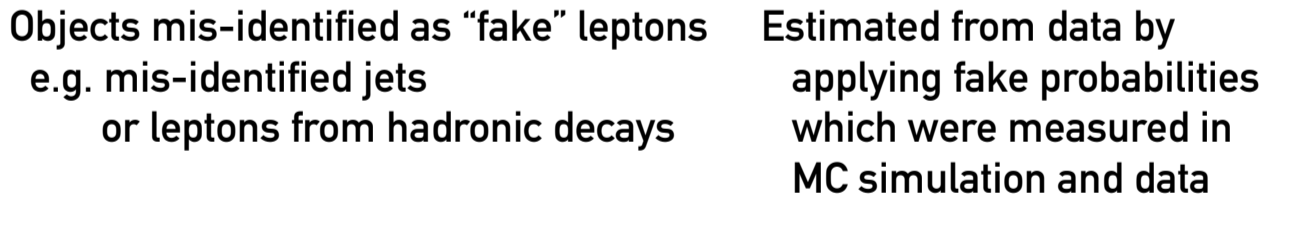


BACKGROUND ESTIMATION

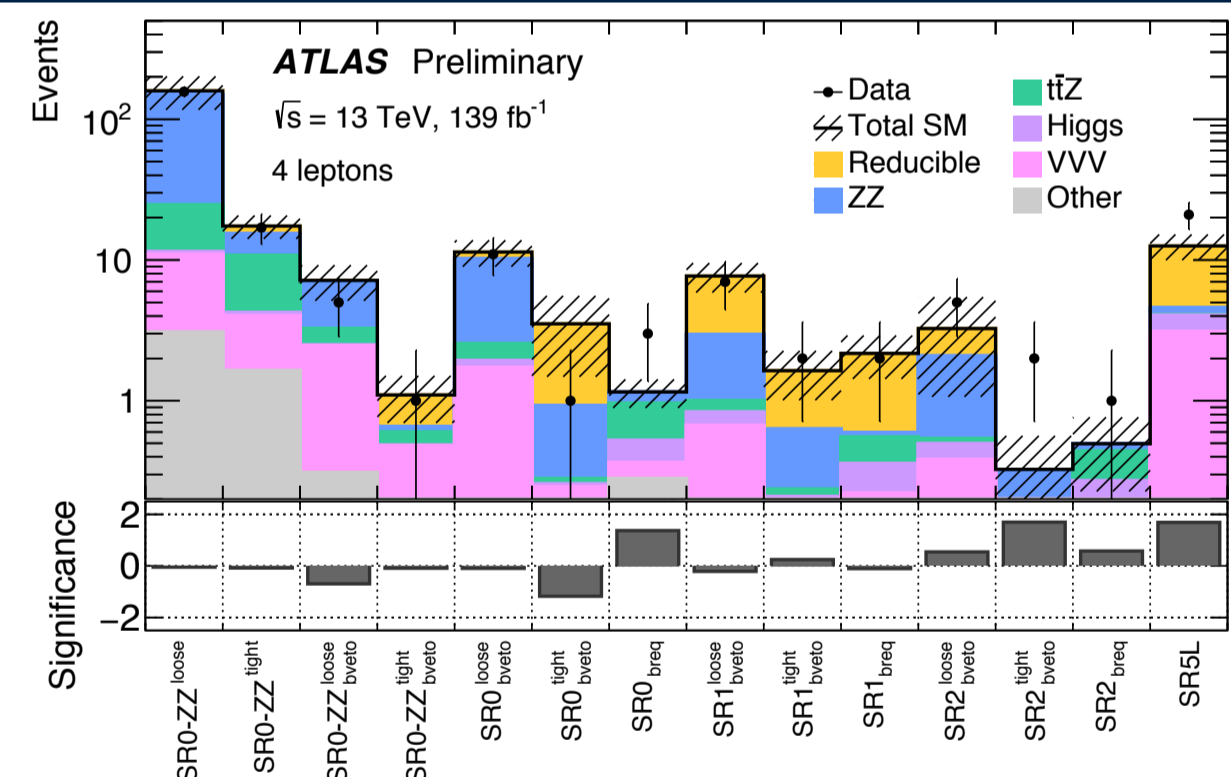
Standard Model backgrounds:



"Reducible" backgrounds:



RESULTS



INTERPRETATION

