Introduction:
Despite the lower cross section with respect to hadronically produced SUSY, electroweak production has become accessible due to the excellent performance of the LHC, delivering roughly 20 fb$^{-1}$ worth of 8 TeV data to CMS in 2012. This result is based on PAS SUS-13-006.

Object- and signal selections:
- standard CMS leptons with distinct features of
  -> $p_T > 20/10$ GeV
  -> well isolated
- little to no requirement on hadronic activity in the events, since we don’t expect much from weakly produced SUSY

Targeted signal models:
many different signal models of electroweak production of SUSY

**chargino - neutralino production:**
![Diagram](image)
3 different scenarios:
- $\rightarrow$ flavor democratic decays
- $\rightarrow$ chargino decays to tau-leptons
- $\rightarrow$ chargino and neutralino to taus only

if the sleptons are too heavy, decays are to W and Z bosons

**chargino - chargino production:**
- charginos can decay either way: 4 possibilities

**slepton pair production:**
only $\ell$electrons and $\ell$muons considered here

The limits:
- no significant excesses observed
  -> in any of the final states and signal regions
  -> upper limits are set on the described models
- only some example exclusions shown here
  -> more can be found online and in the PAS
  -> follow this to find all the information
- a final update of this analysis will follow shortly
  -> probing lower mass splitting, including off-shell W

Analysis strategies:
- many strategies employed to cover a wide range of final states and backgrounds

fake-rate method
- based on a tight-to-loose estimation method for the leptons, probabilities measured in auxiliary samples in data and applied to sidebands in data

charge mis-ID
- probability measured in data and applied to sidebands in data

template method
- measure and fit the $M_T$ spectrum in corrected auxiliary data samples which feature similar kinematics as the backgrounds

$M_T$
- a variable which reduces SM backgrounds (similar to $M_{T2}$) is used and the distribution is fit on data at low values to extrapolate to the signal region

MC simulation
- irreducible backgrounds taken from MC with validation on and corrections from data where possible