Exercise 1

❑ **General Question : can we discover the chargino at LHC ?**

  ▪ We know it's hard but we will try to be quantitative !

❑ **Organisation:**

  ▪ 15' : Put in context: what we should know about EWKino sector for this exercise

  ▪ 45' : Background : how to reduce them, which one dominates ? [WIDE DISCUSSION]

  ▪ Form groups of 2 people

  ▪ 1h : Signal Region definition : what discriminating variables ? [USE OF ROOT MACRO]

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  ▪ 1h : Signal Region definition : SR design and sensitivity expected [USE OF ROOT MACRO]

  ▪ 30' : Compare with the published results …

  ▪ 30' : Impact of this study and left-over ?

❑ **Root Macro: 557 MB (!)** → Check that the macro works on your laptop before the exercise !!

  ▪ http://www.cern.ch/pralavop/SUSYAnalyzer.tar.gz [Final version have files dated 15-Oct]

  ▪ When downloaded: tar -xzvf SUSYAnalyzer.tar.gz; cd SUSYAnalyzer and follow README

  ▪ Originally setup for ROOT 5.34.05. Works for 5.28/00 onwards.