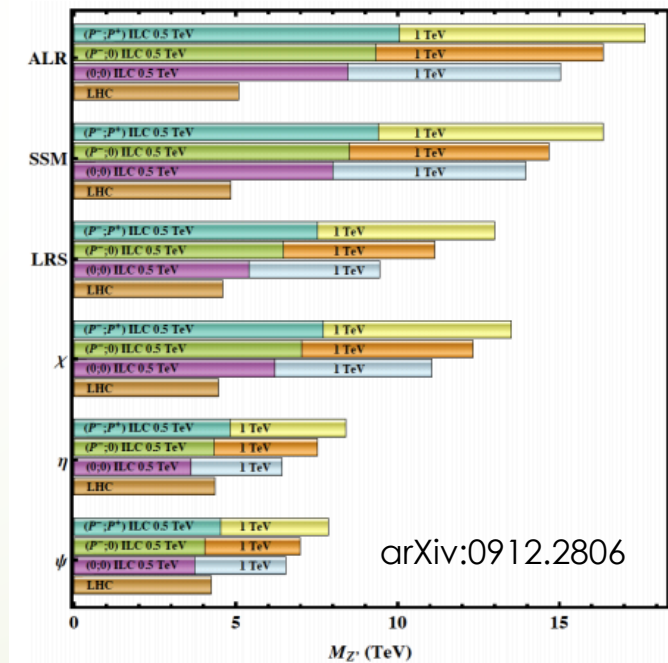
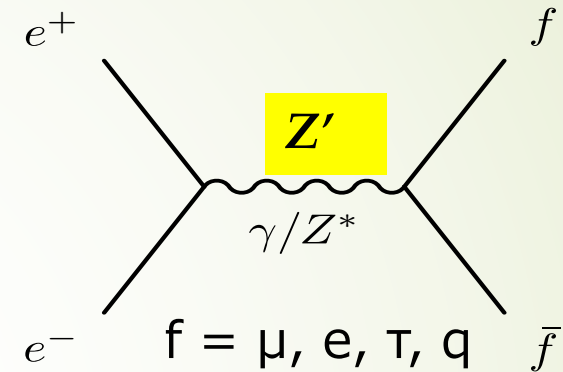


# Plan of 2-fermion process

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# Purpose of 2-fermion process study

- Purpose : Search of heavy neutral gauge boson  $Z'$
- @ILC
  - Measure interference effect
  - $Zff$  coupling, angular, distribution etc..
    - Determinate new physics model
- Favorable at more than 500 GeV, but certainly meaningful starting from 250 GeV



My status : Making Marlin processor for  $Z \rightarrow \mu\mu$  process



# My schedule

- ▶ April
  - ▶ Construct my processor for  $Z \rightarrow \mu\mu$  process and study.
- ▶ May
  - ▶ (If study of  $Z \rightarrow \mu\mu$  process is finished,) start the study of other process.
- ▶ June
  - ▶ Summarize research results
  - ▶ Report the results at AWLC@SLAC