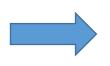
# Weekly Summary

- Higgs->invisible (Yuhang)
  - -- Arrange the code structure (partly refer that of Higgs2zz)
- Higgs-> ZZ (Lingteng)
  - -- Applying the scale factor
- CMOS Pixel Sensor data analysis (Ryuta)
  - -- Trying the decode process & asking the data location

### Ryuta

-- Try to decode the data taken @ DESY



have found that the data format is not identical as the past & need some setup on the IHEP server for the EUtelescope part.

- -- Preparation of documents for the PIFI application
- -- Preparation for the talk @ 2018 Autumn JPS
- -- Introduction page of the CEPC on the X-Team

#### Yuhang

Submit.sh: Higgs->invi.

```
case $option in
            0.1.1) echo "Running on signal and background samples..."
34
                  if [ ! -d "steer" ]; then
                          mkdir steer
                  fi
                  if [ ! -d "splitted" ]; then
                          mkdir splitted
                  fi
                                                  Compare & extract good
                  rm job/job.out -rf
41
                  mkdir job/job.out
                                                 part from both side.
                  rm job/job.err -rf
42
                   mkdir job/job.err
44
                   cd job
45
                   bash run sample
45
            ;;
47
48
           0.1.2) echo "Synthetizing seperated ROOT files..."
                  if [ ! -d "presel" ]; then
49
50
                          mkdir presel
                  fi
                   cd job
53
                   ./hadd.sh
54
            ;;
            0.1.3) echo "Drawing distributions of cut variables and calculate ratios of bachground over
                  if [ ! -d "figs" ]; then
                          mkdir figs
59
                  fi
                  if [ ! -d "logfiles" ]; then
50
61
                          mkdir logfiles
62
                  fi
63
                   cd job
64
                  hep_sub -g physics cut_variable_job -e job.err -o job.out
            ;;
```

#### Submit.sh: Higgs->ZZ

```
# 0.1 Signal
0.1) echo "Running on signal sample..."
     ;;
0.1.1) echo "Split signal sample with each group 0.5G..."
      mkdir -p ./run/llh2zz/samples
       ./python/get samples.py ${signal slcio dir} ./run/llh2zz/samples/E240 Pllh zz.txt 0.5G
       ;;
0.1.2) echo "Generate XML input files for Marlin job..."
      mkdir -p ./run/11h2zz/steers
               ./run/11h2zz/steers/test
      mkdir -p ./run/11h2zz/ana
       ./python/gen steerfiles.py ./table/template jobfile.xml ./run/11h2zz/samples ./run/11h2zz/steers ./
       ;;
0.1.3) echo "Run with a few events ..."
      source setup.sh
      ./build.sh
      Marlin ./run/11h2zz/steers/test/sample-1.xml
       ;;
0.1.4) echo "Generate Condor job scripts..."
      mkdir -p ./run/llh2zz/condor/script/marlin
       ./python/gen_condorscripts.py 1 ./run/llh2zz/steers ./run/llh2zz/condor ${sel_signal}
      ;;
0.1.5) echo "Submit Condor jobs for pre-selection on signal..."
       cd ./run/llh2zz/condor
      mkdir -p log
      ./condor_submit.sh
      ;;
0.1.6) echo "Select events on signal (with a small sample)..."
      mkdir -p ./run/11h2zz/events/ana
       ./python/sel_events.py ./run/llh2zz/ana/ana_File-1.root ./run/llh2zz/events/ana/ana_File-1_event.
```

## Kong Lingteng

- Get the AFS account and learn how to submit jobs.
- Read the sel\_events.py, learn how it works.
- Edit plt\_summary.py and plot the signal of dimuon

