participants:
Y. Kato, J. Tian, K. Fujii, T. Suehara, T. Watanabe, K. Yumino, T. Takahiro, Y. Aoki, K. Hidaka, D. Jeans

— announcement
ECFA Higgs factory kickoff meeting June 18
https://indico.cern.ch/event/1033941/

IDT-WG3-Phys June 17

ILC Pre-Lab proposal submitted to MEXT

Official budget request deadline August

— focused talk: kinematic fitting (Y. Kato)
- test process: ZH->mu mu bb / qqbb
  - constraints: 4-momentum conservations; Higgs mass; Z mass B-W soft constraint
  - fit objects: 4 jet energies + 1 ISR photon

Q: P3, why is there a peak for ZZ at mW in m(Z) plot?
A: because hard constraint on m(bb), m(qq) is pulled to lower value
C: kinematic fitting for three hypotheses ZH / ZZ /WW, chi2 can be used to separate S & B

Q: b-tag peak at 1?

Q: P4, bottom-left for b-jet, each event two entries merged
A: yes

Q: flavor dependence?

Q: m10 meaning?
A: Scale mass of 10 GeV

- signal: ZH-> mu mu phi phi -> mu mu bbbb
- kinematic fitter:
  - basic method assumes non-Gaussian response
  - log-likelihood function for arbitrary response
  - basic method is reproduced with Gaussian response

— roundtable
- study of e+e- -> gamma + higgs (Y. Aoki)
  progress: MC uncertainty for right-handed case
  next step: writing paper

Q: uncertainty important?
A: not for H—>bb channel; large effect for H—>WW*; maybe fine in combined upper limit

Q: what is nominal / conservative?
A: nominal case is for observed # of events directly from available MC sample; conservative case is re-estimated # of events based efficiencies of each cut

- A_LR measurement using radiative return process (T. Mizuno)
progress: MC truth is now correct; the earlier problem was because signal photon is included in the jets
next step: remove further double counting among two jets; wrap up jet energy scale calibration study

- tau polarization measurement in e+e- -> di-tau process (K. Yumino)
progress: results with cone method & cone method + mid-point method; acceptance as function of polarimeter;
next steps: re-evaluate acceptance using proper definition, histograms should be for MC truth information, using events before and after selection

Q: how acceptance is calculated?
A: reconstructed divided by MC truth histogram

Q: x-axis is for MC pi polarimeter?
C: should always use MC histogram before & after selection

- study on right handed neutrino at ILC (J. Nakajima)
progress: signal events generation using narrow-width approximation instead of 6-fermion production
next step: move to full simulation

— Next week's focused talk: Kyushin U.