Little Higgs T-parity @ILC

Optimization meeting 2011.04.15 Eriko Kato

Current status on calculation environment

- Laptop
- Now capable of running cxx generators and analyzing them.
- Currently adjusting environment so that Fortran generators can run as well.
- Tohoku PC
- It might take a while to build an environment for ILC analysis in Tohoku Univ. Plan to negotiate with Nagamine san.

Status and plan

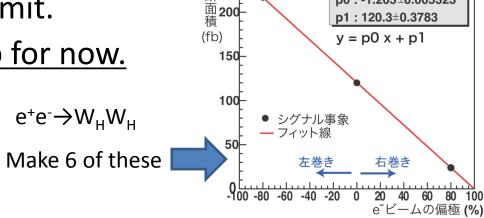
- Mostly finished with mass extraction and parameter extraction study.
- Moving on to studying LHT cross section measurement with dependence to polarization.
 - Events which will be studied:

 $e_H e_H$, $Z_H Z_H$, $v_{eH} v_{eH}$, $v_{\mu H} v_{\mu H}$, $W_H W_H$, $Z_H A_H$ total of 6 analysis modes.

cross section vs polarization

AIM

- Want to make data samples for 3 different polarization points.
- Minimum required date space
- event generation & simulation
- WW 16G, tt 2G, eeWW 4G, LHT 1G × 6(for sim.C)
- 35G × 3(polerization point)=105G
- 110G,120G will be needed at least.
- Close to laptop capacity limit.
- Start studying with laptop for now.



 χ^2 / ndf : 0.3949 /1 p0 : -1.205±0.005323