

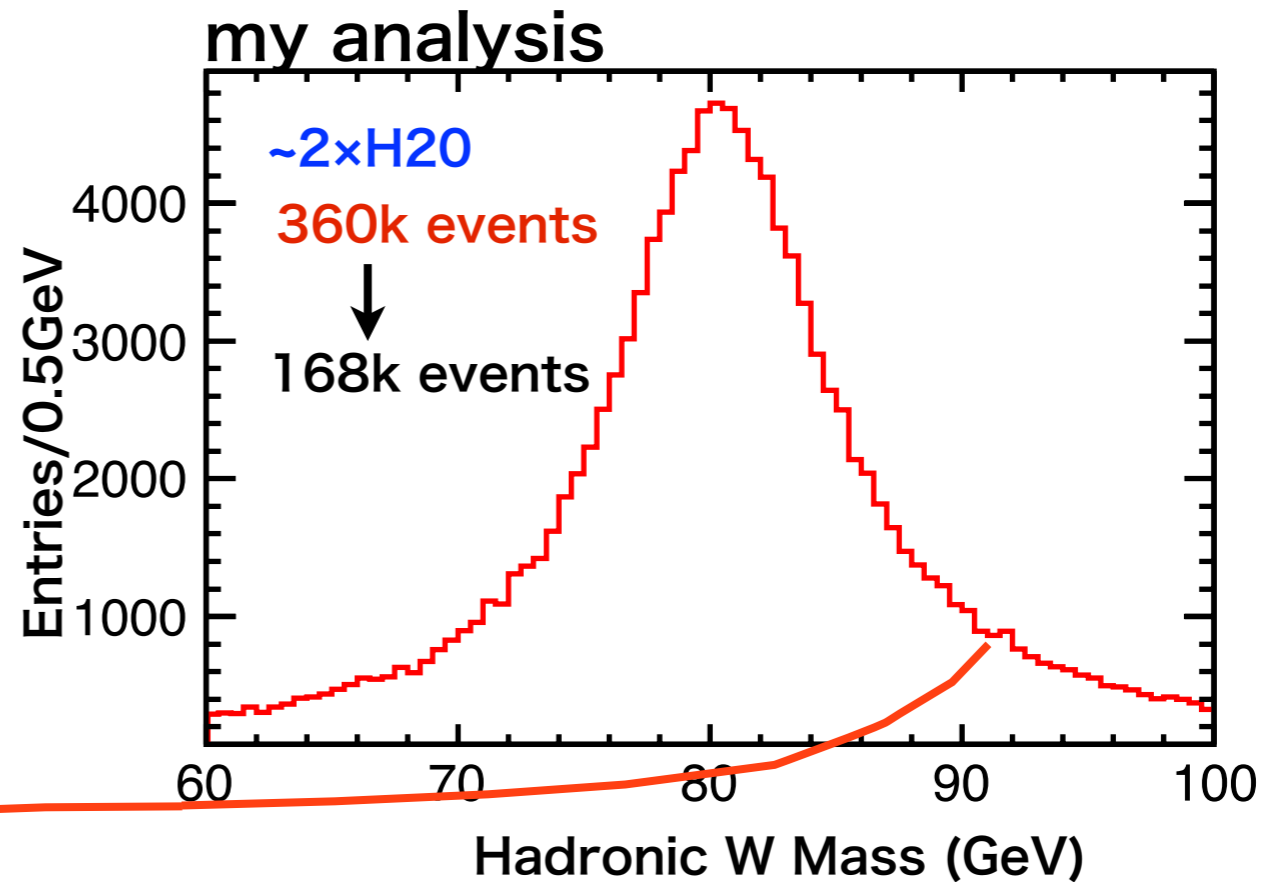
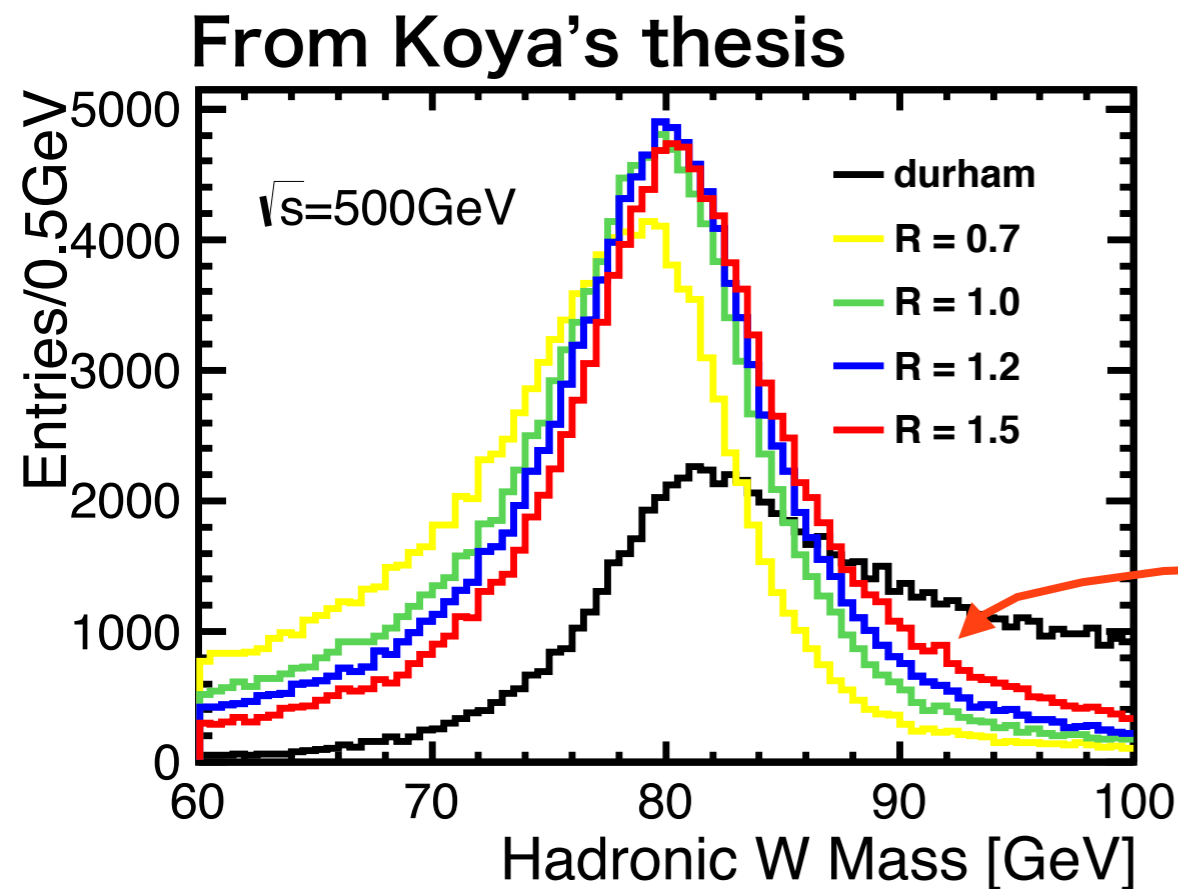
28th September 2016

M_W from $ee \rightarrow e \nu W$

ILD: Higgs and EM working group

K. Kotera,

$\sqrt{s} = 500\text{GeV}$ eLpR w/ kT algorithm

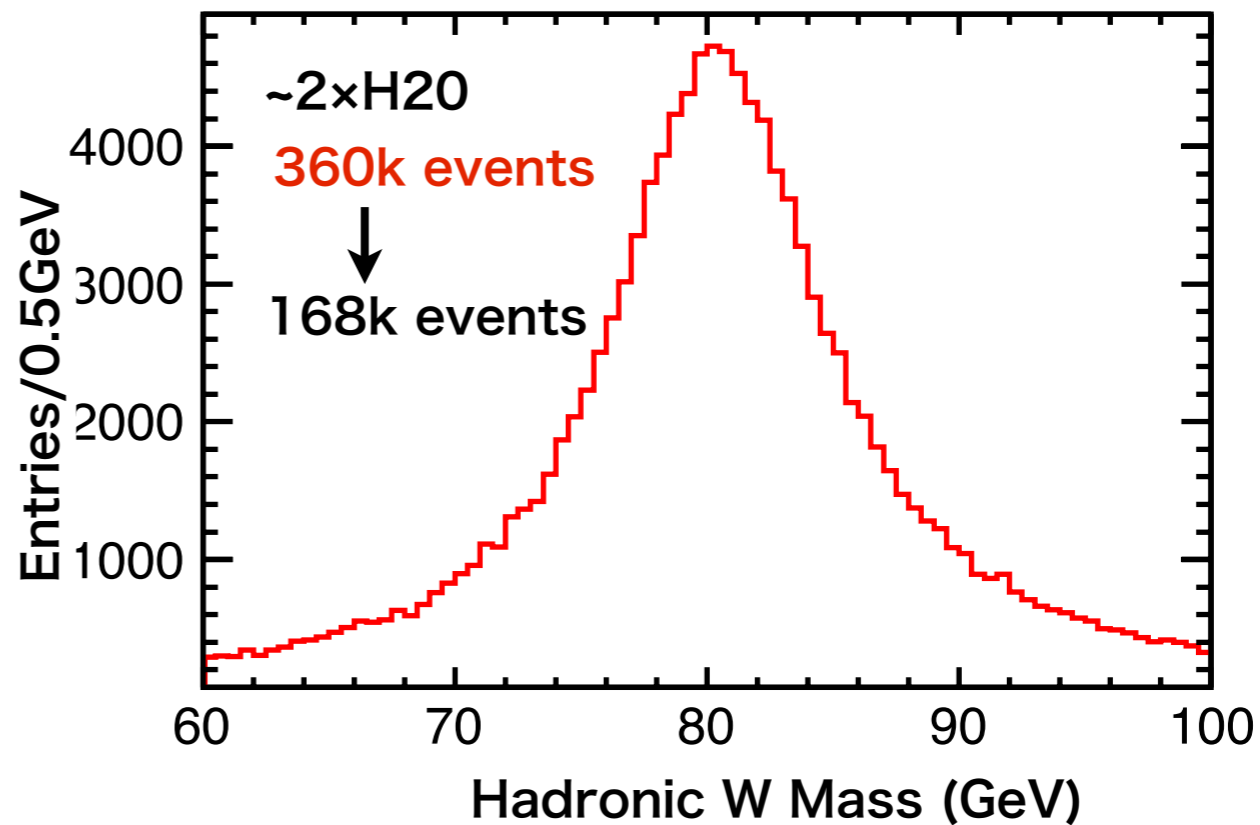
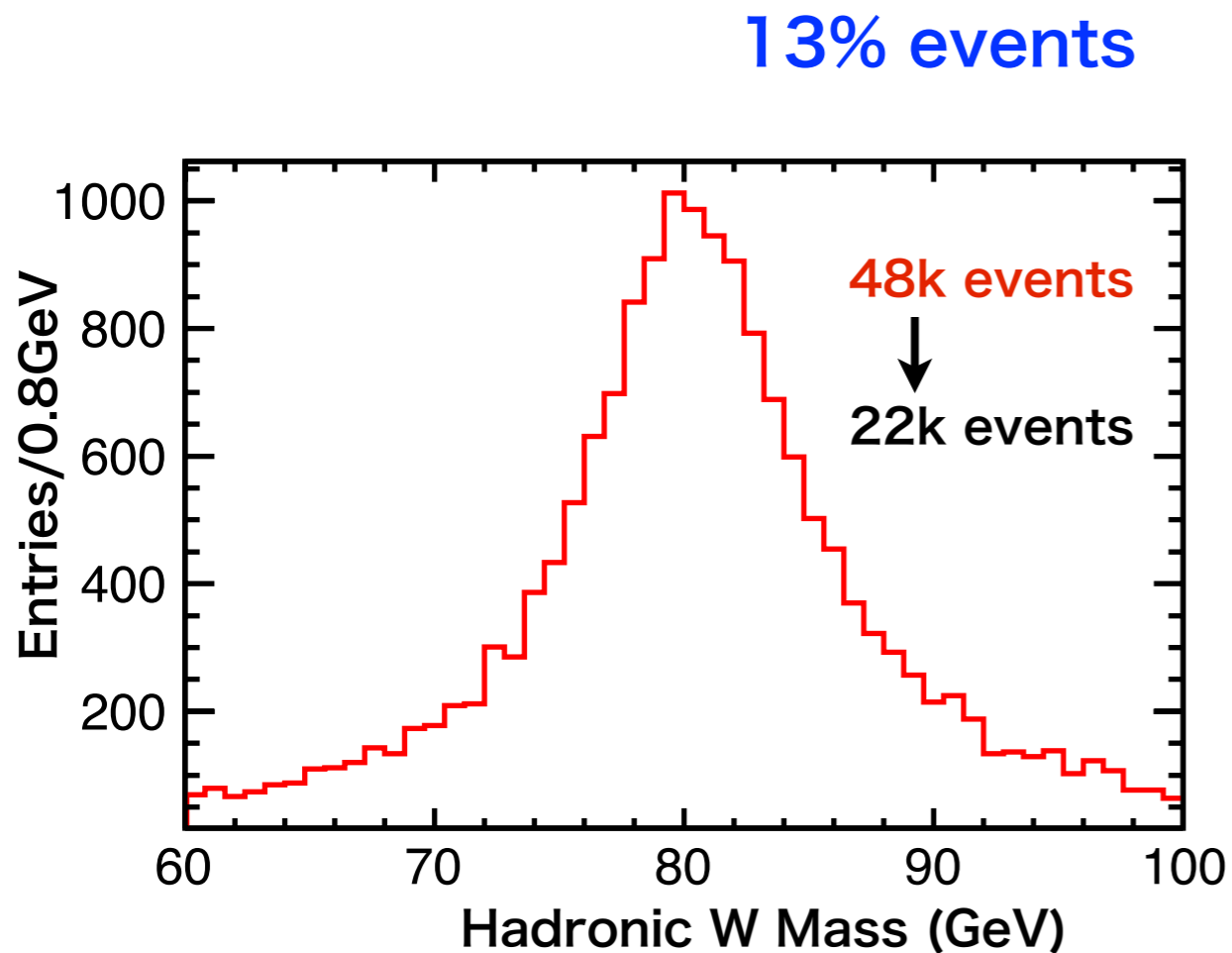


Koya's W_{mass} using DBD data in KEK was completely reproduced.

Next;

need simulation data with the latest reconstruction procedure in v01-17-10.

$\sqrt{s} = 500\text{GeV}$ eLpR w/ kT algorithm



To check difference between DBD and latest reconstruction.

need: ~50k events of sw_sl_500_eLpR data

DST contents: default +
GammaGammaCandidatePi0s, dEdx, shower shape ...

Others

This morning I received fruitful suggestions from Graham.

Example:

Mw reconstruction

composition of

$W \rightarrow u \text{ dbar}$
 $W \rightarrow u \text{ sbar}$
 $W \rightarrow c \text{ dbar}$
 $W \rightarrow c \text{ dbar no neutrino}$
 $W \rightarrow c \text{ sbar}$
 $W \rightarrow c \text{ sbar no neutrino}$

Jet energy scale (calib)

composition of

$Z \rightarrow u \text{ ubar}$
 $Z \rightarrow s \text{ sbar}$
 $Z \rightarrow c \text{ cbar}$
 $Z \rightarrow b \text{ bbar}$

difference can make systematics

investigate by separating categories using MC info.

difference of the distribution of:

polar angle of W

polar angle of Z