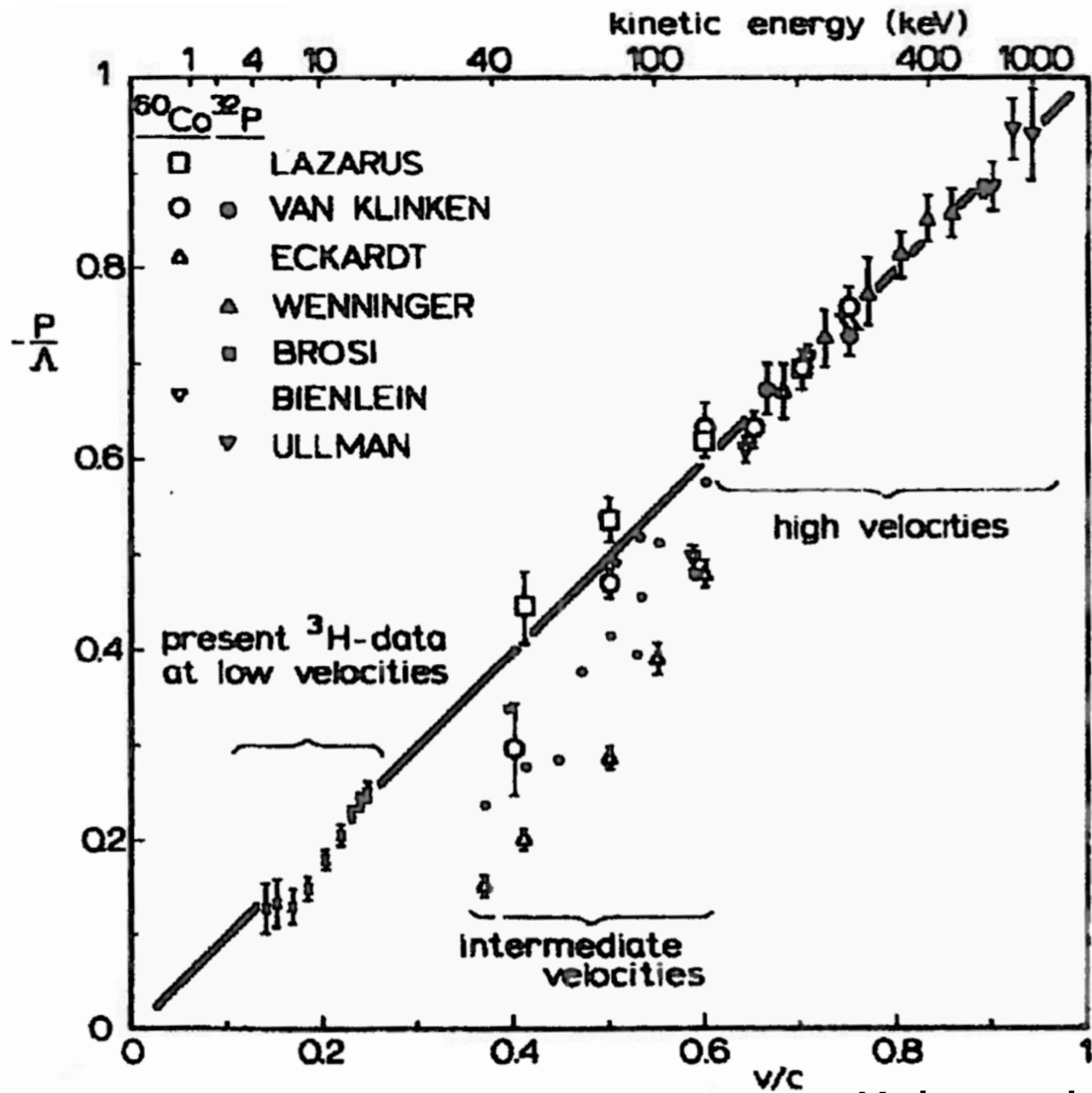


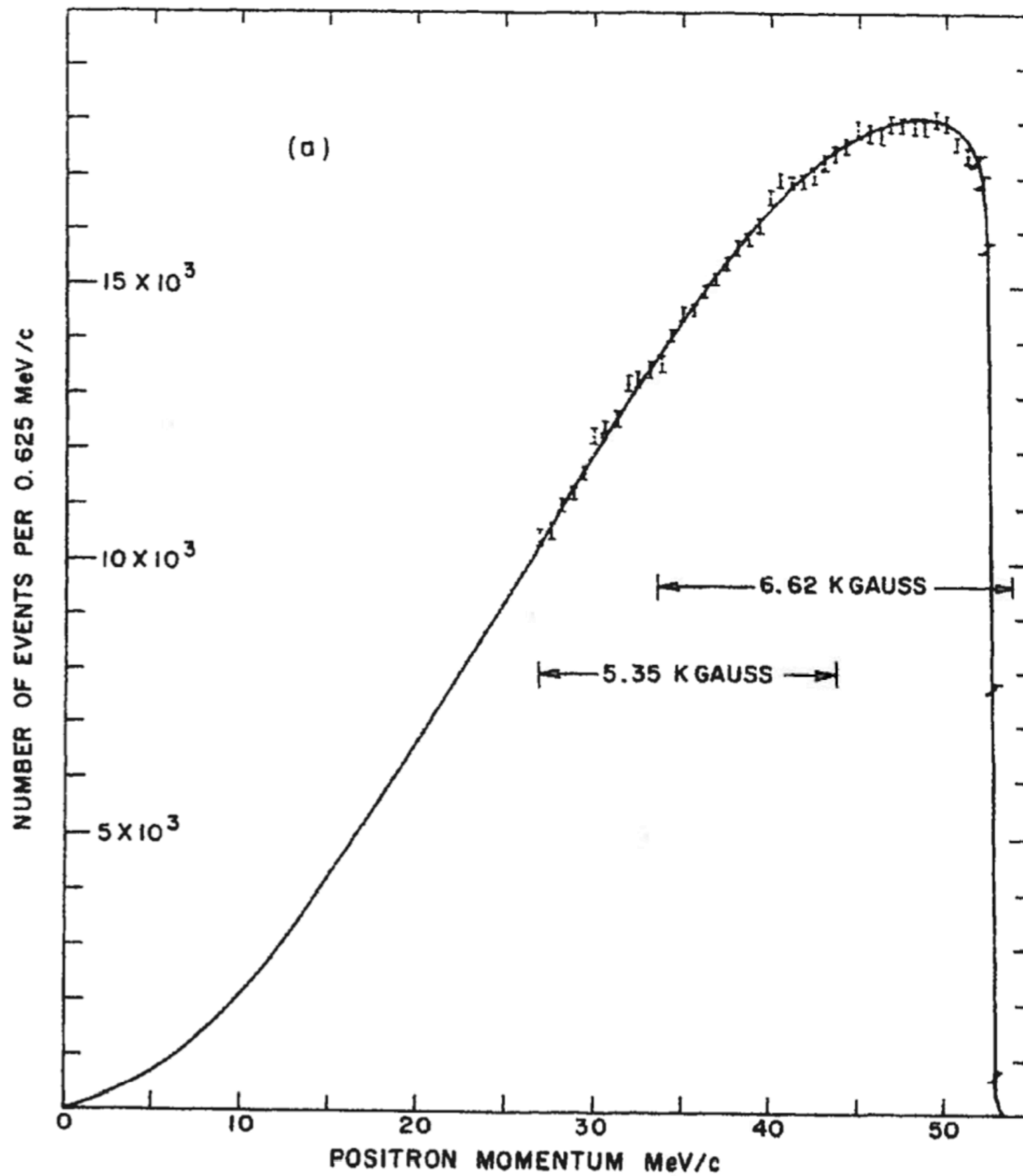
Electroweak Interactions and Higgs

figures for lectures 1 and 2

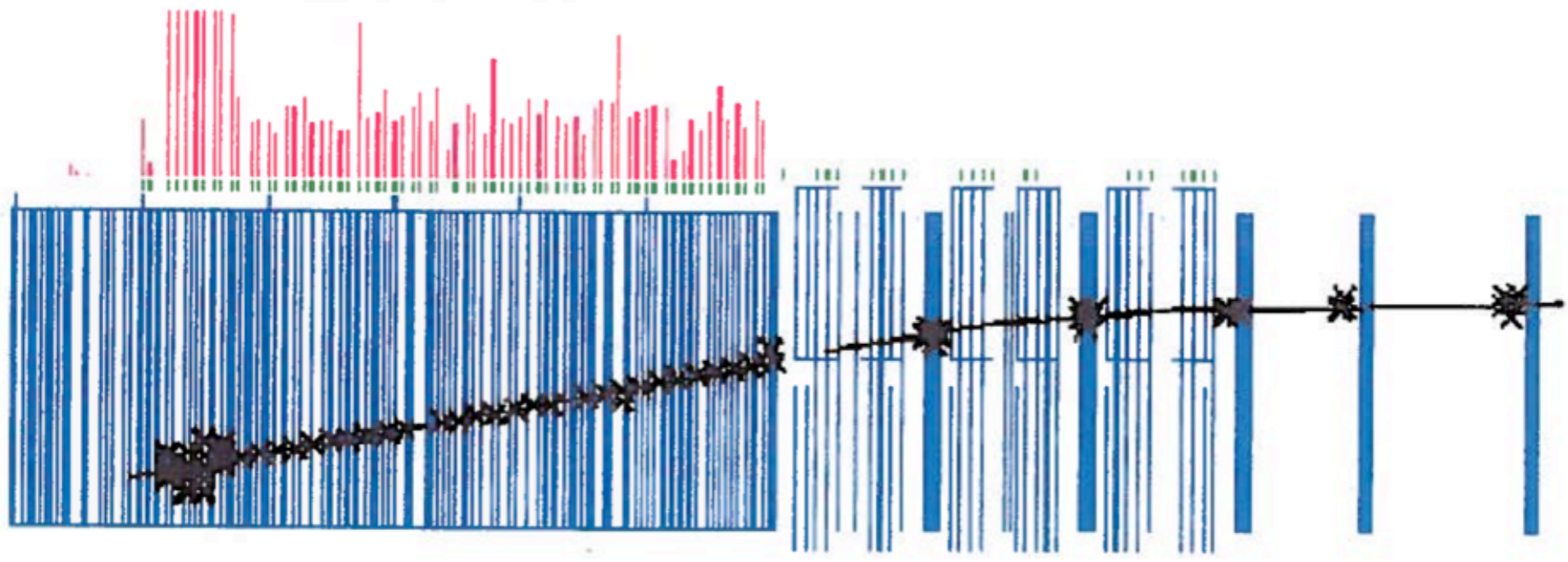
Michael Peskin
ICTP School 2015



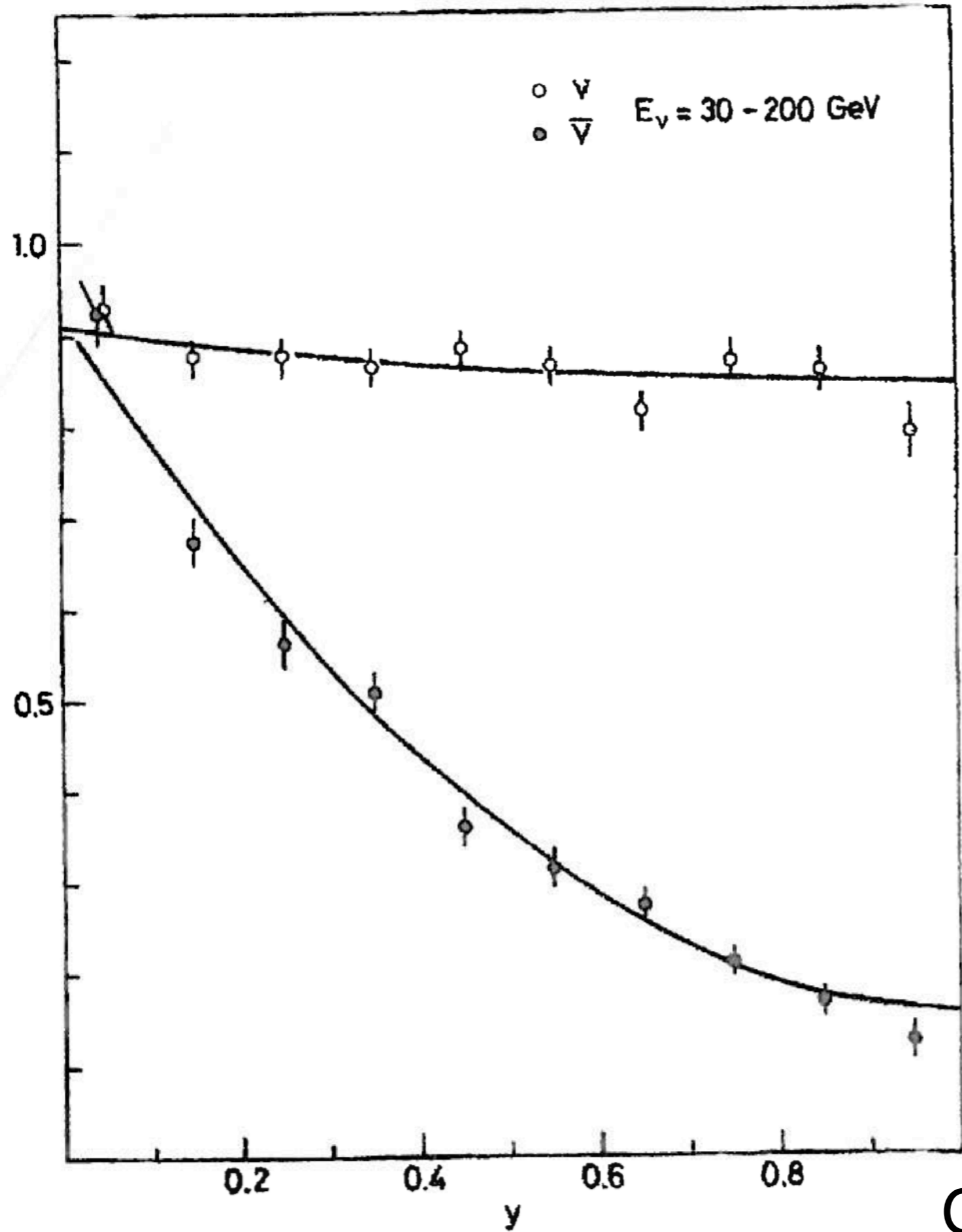
Koks and van Klinken



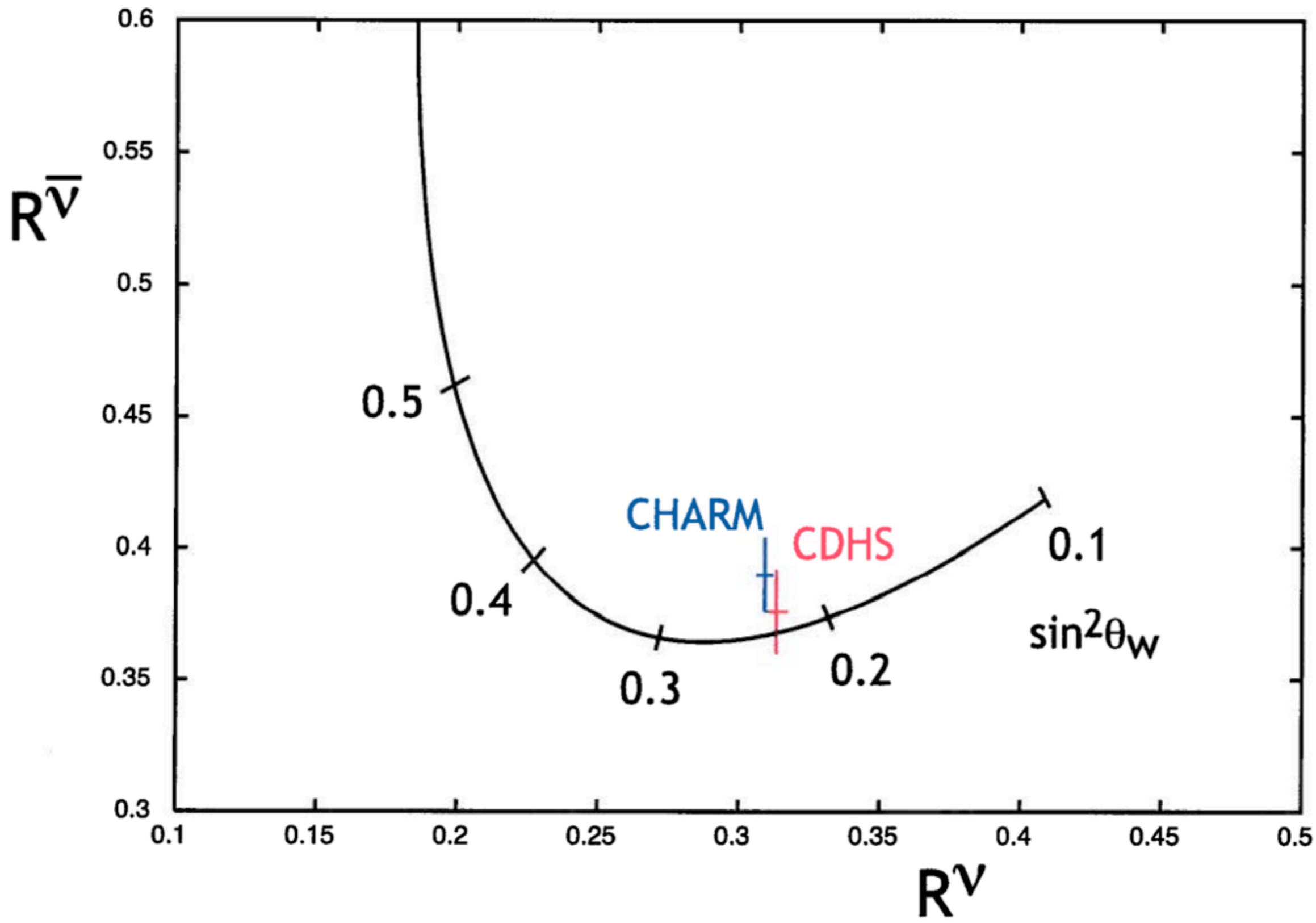
Bardon et al.

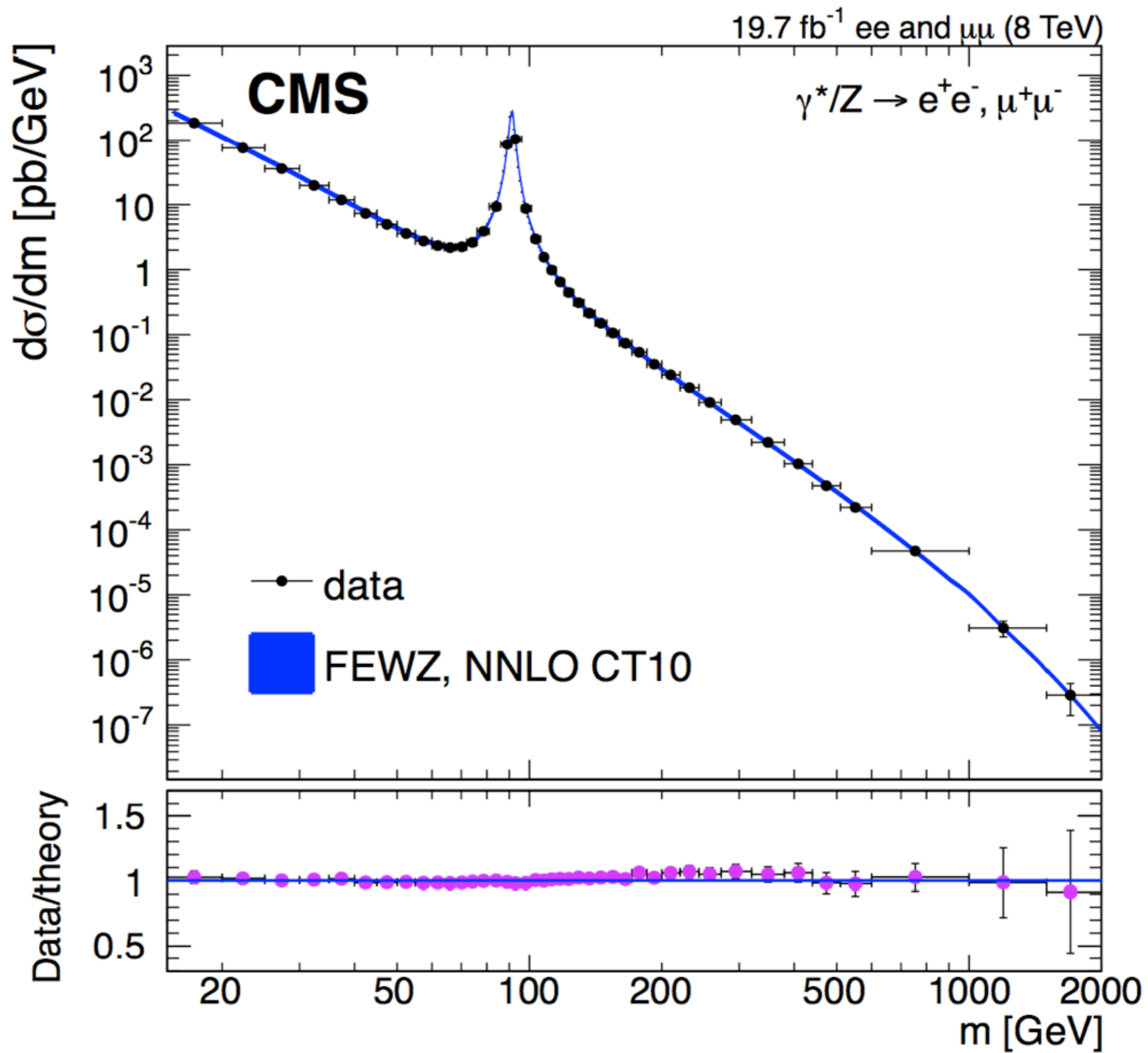


NuTeV experiment



CDHS experiment

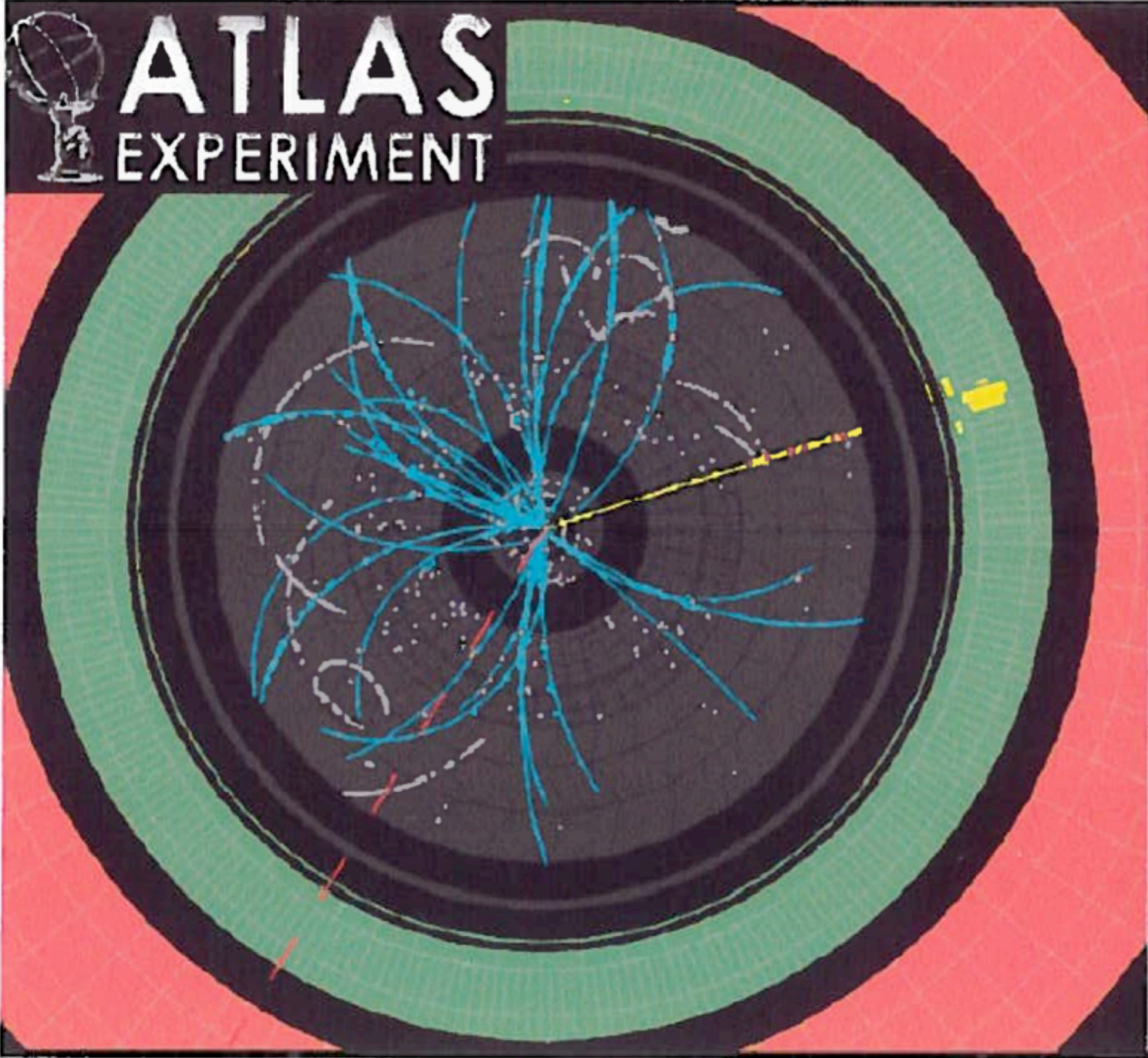






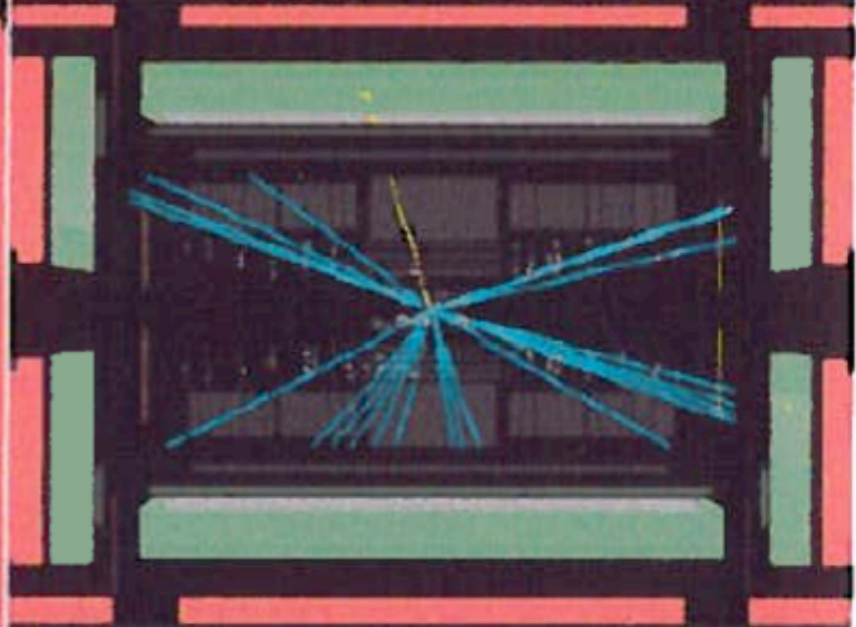
ATLAS

EXPERIMENT



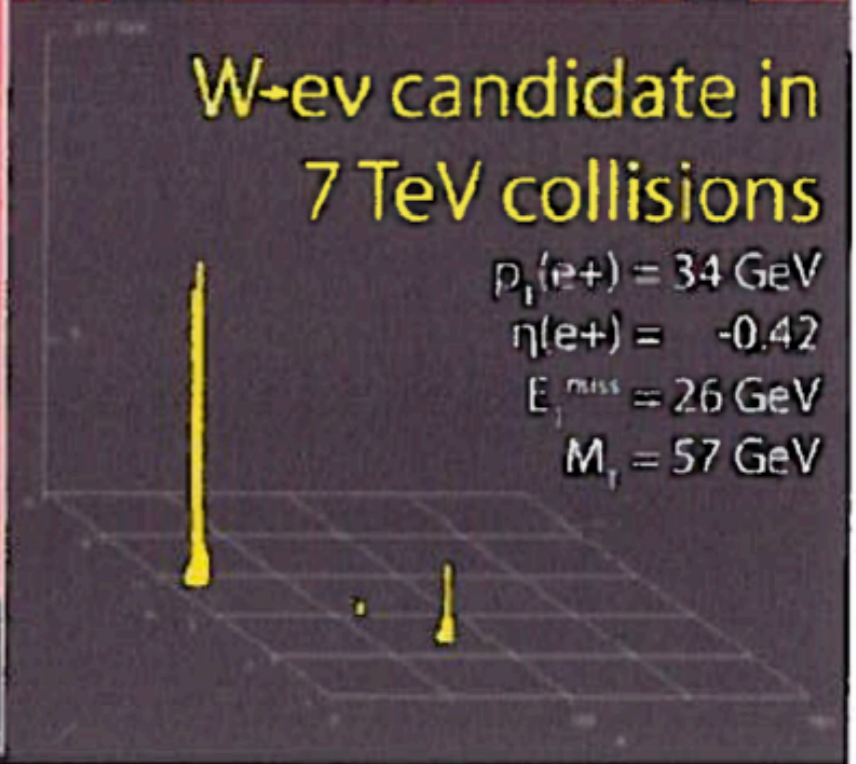
Run Number: 252400, Event Number: 5966801

Date: 2010-04-05 06:54:50 CEST



W-ev candidate in 7 TeV collisions

$p_T(e^+) = 34 \text{ GeV}$
 $\eta(e^+) = -0.42$
 $E_T^{\text{miss}} = 26 \text{ GeV}$
 $M_T = 57 \text{ GeV}$



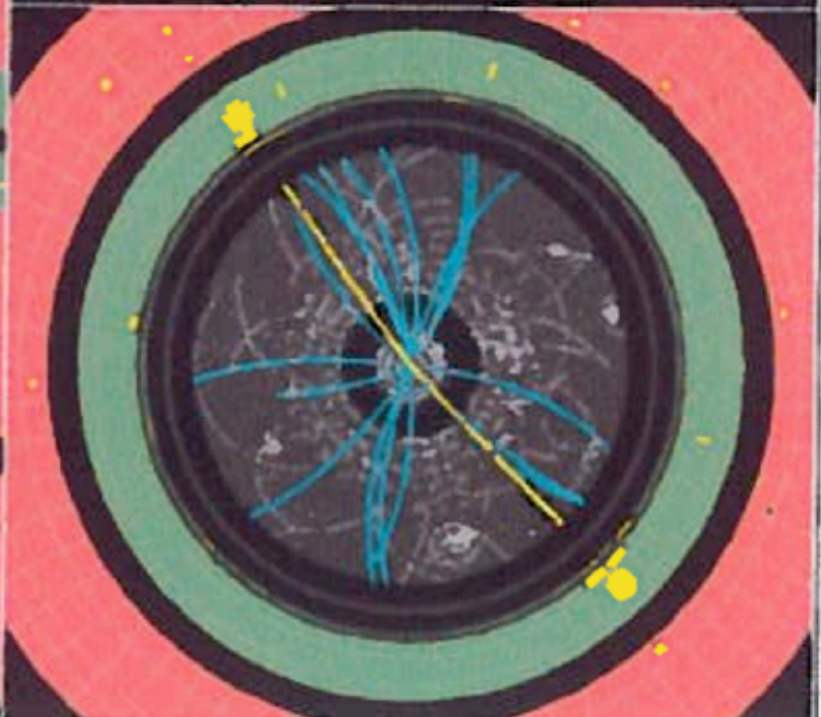
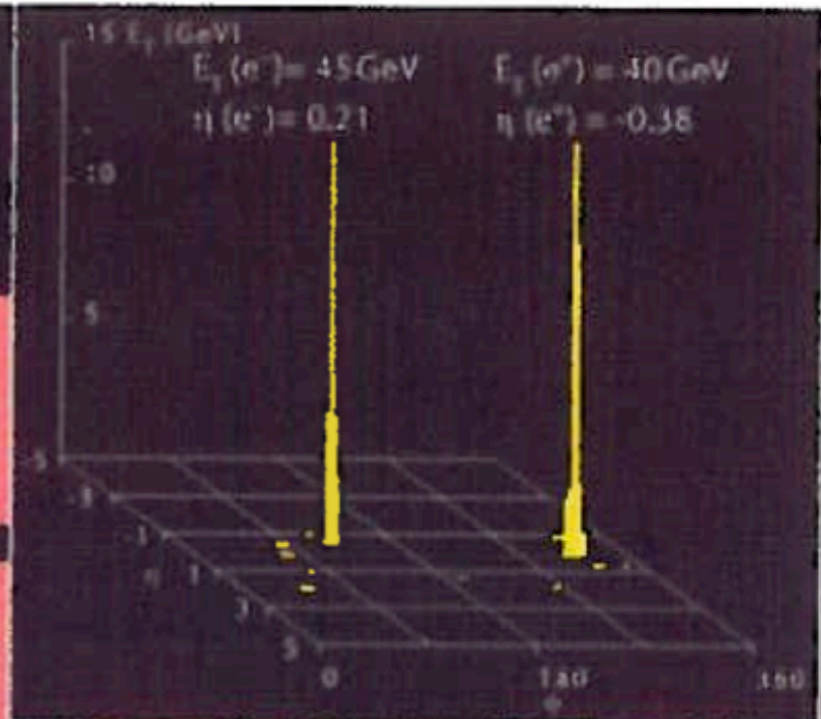
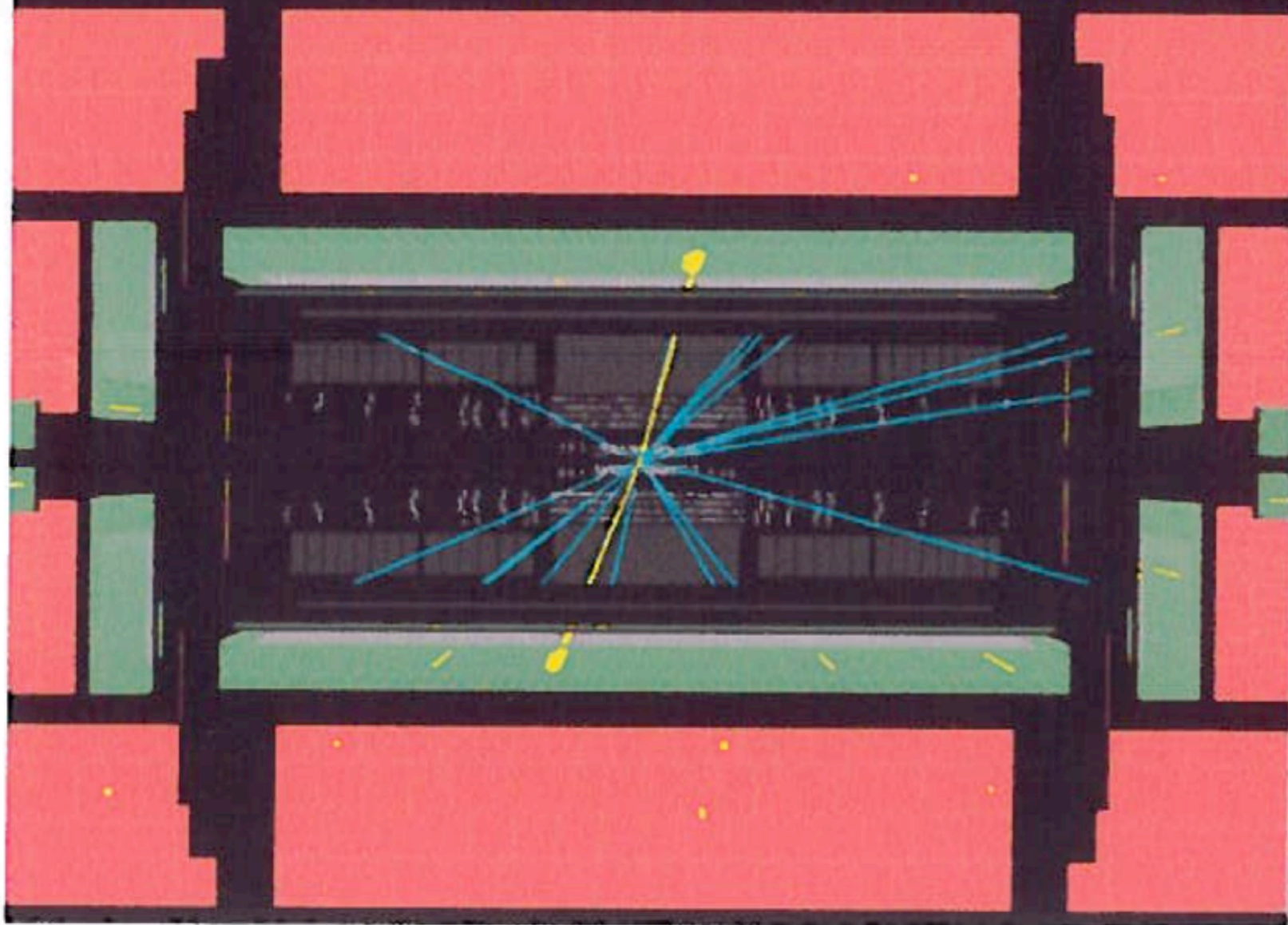
 **ATLAS**
EXPERIMENT

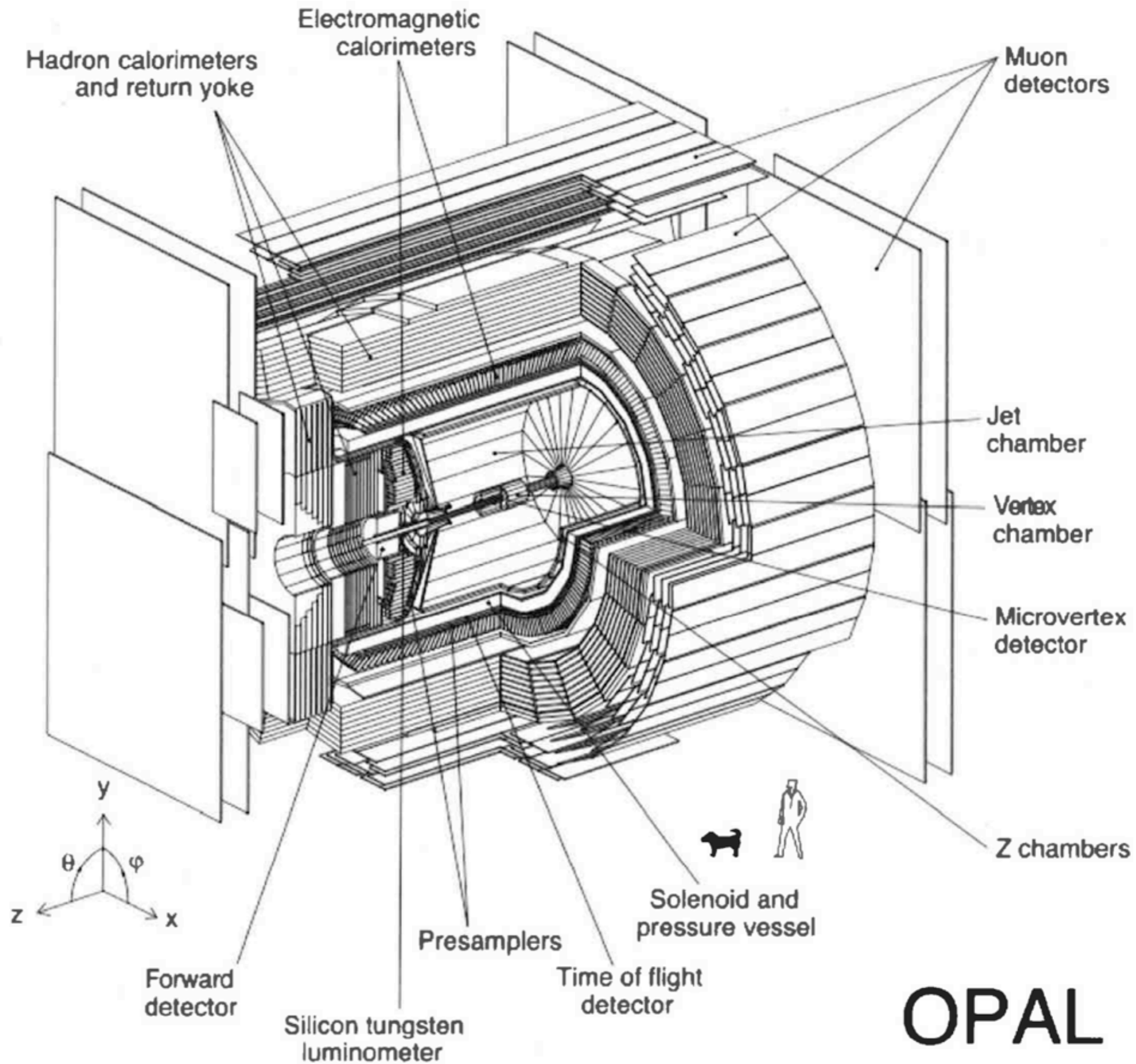
Run Number: 154817, Event Number: 958871

Date: 2010-05-09 09:41:40 CEST

$M_{ee} = 89 \text{ GeV}$

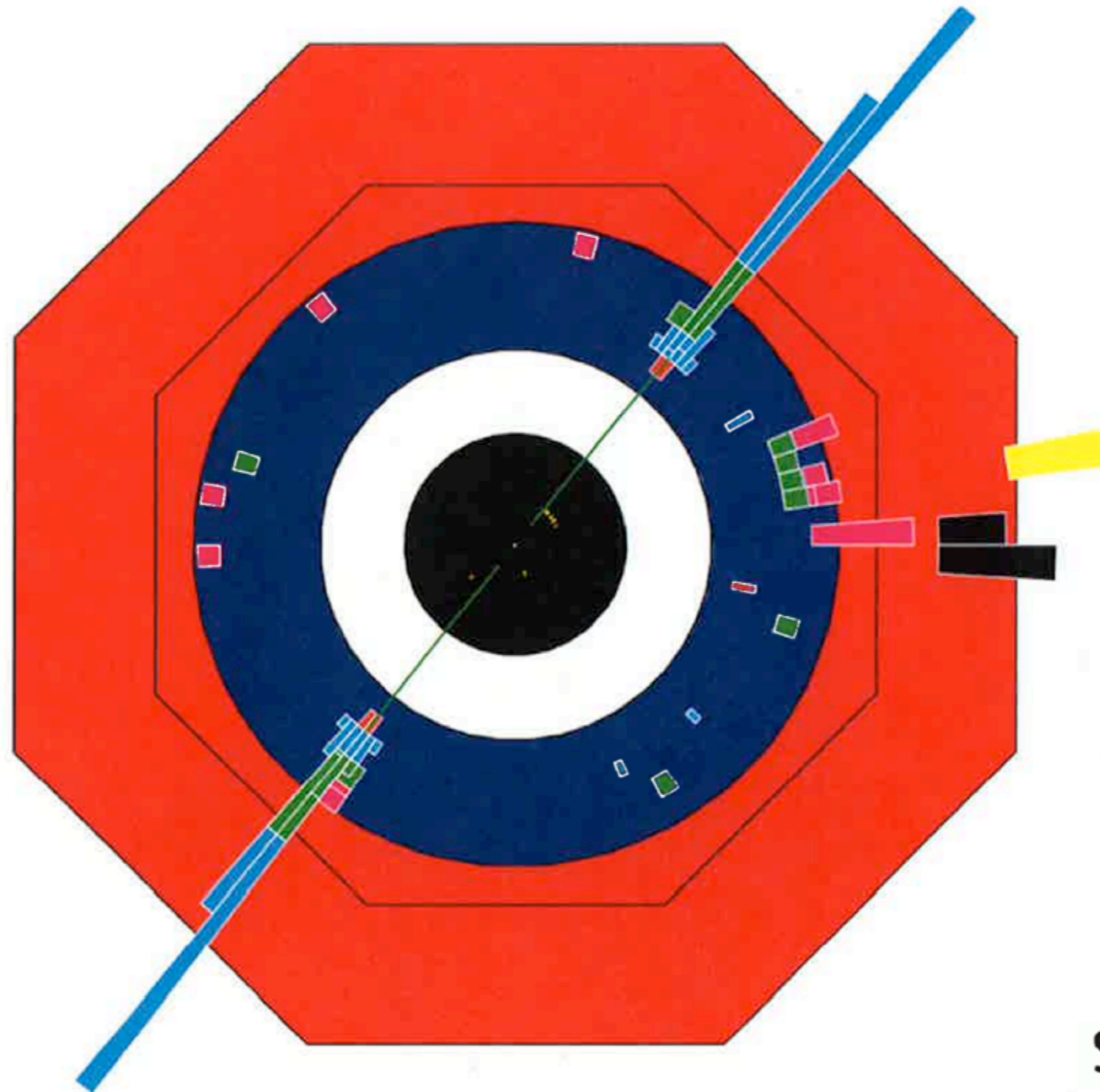
Z-ee candidate in 7 TeV collisions



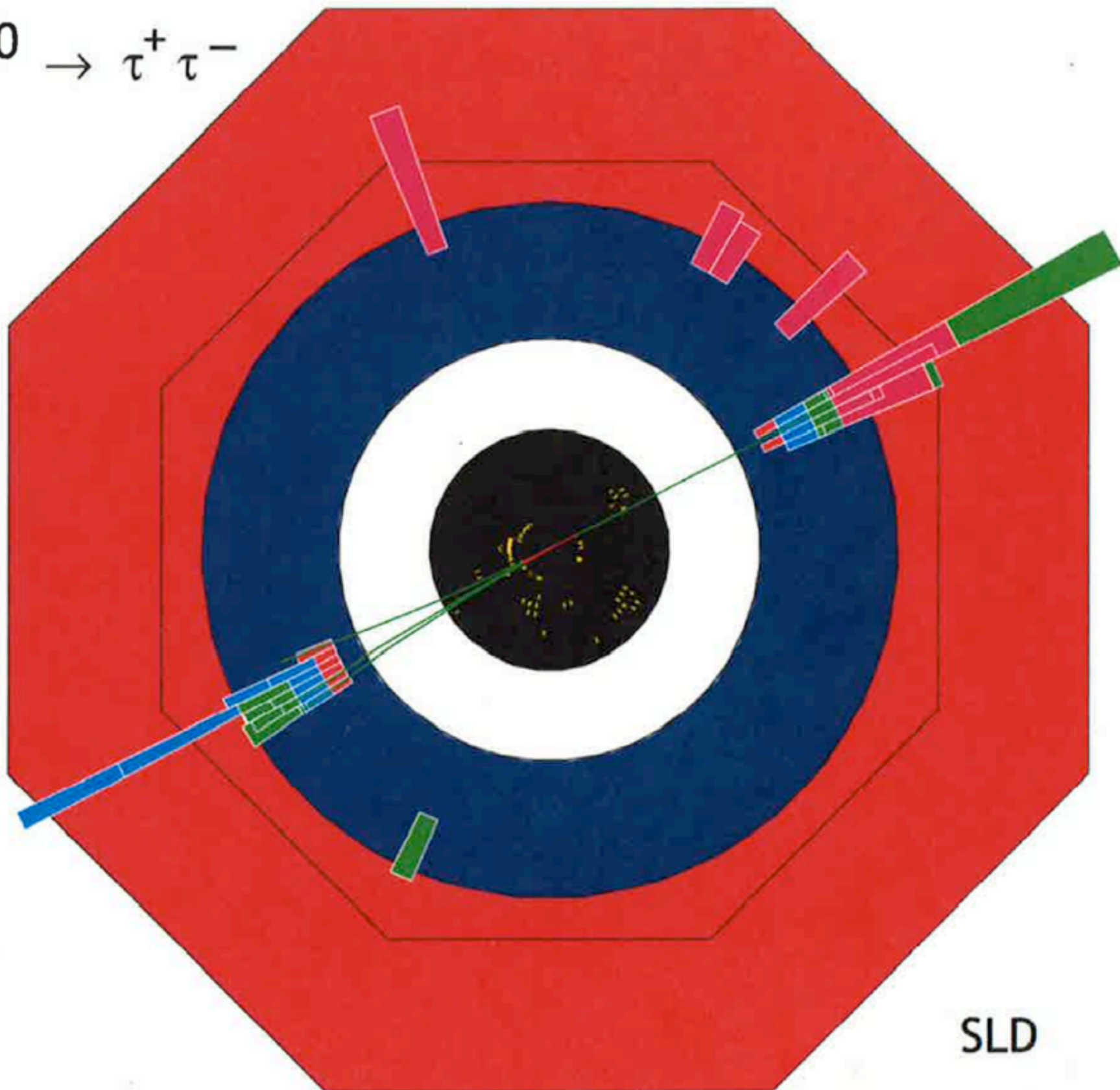


OPAL

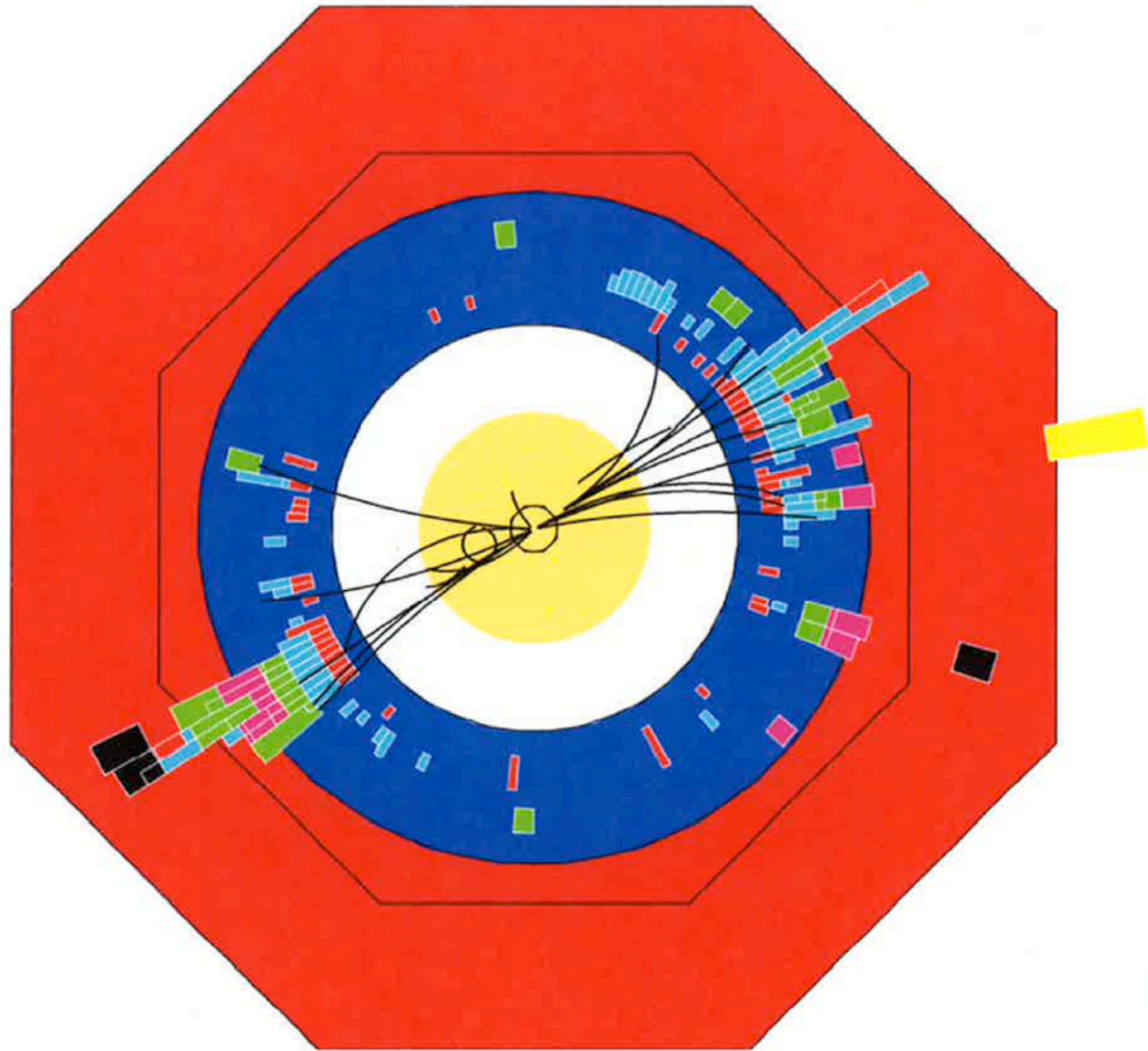
$$e^+e^- \rightarrow Z^0 \rightarrow e^+e^-$$



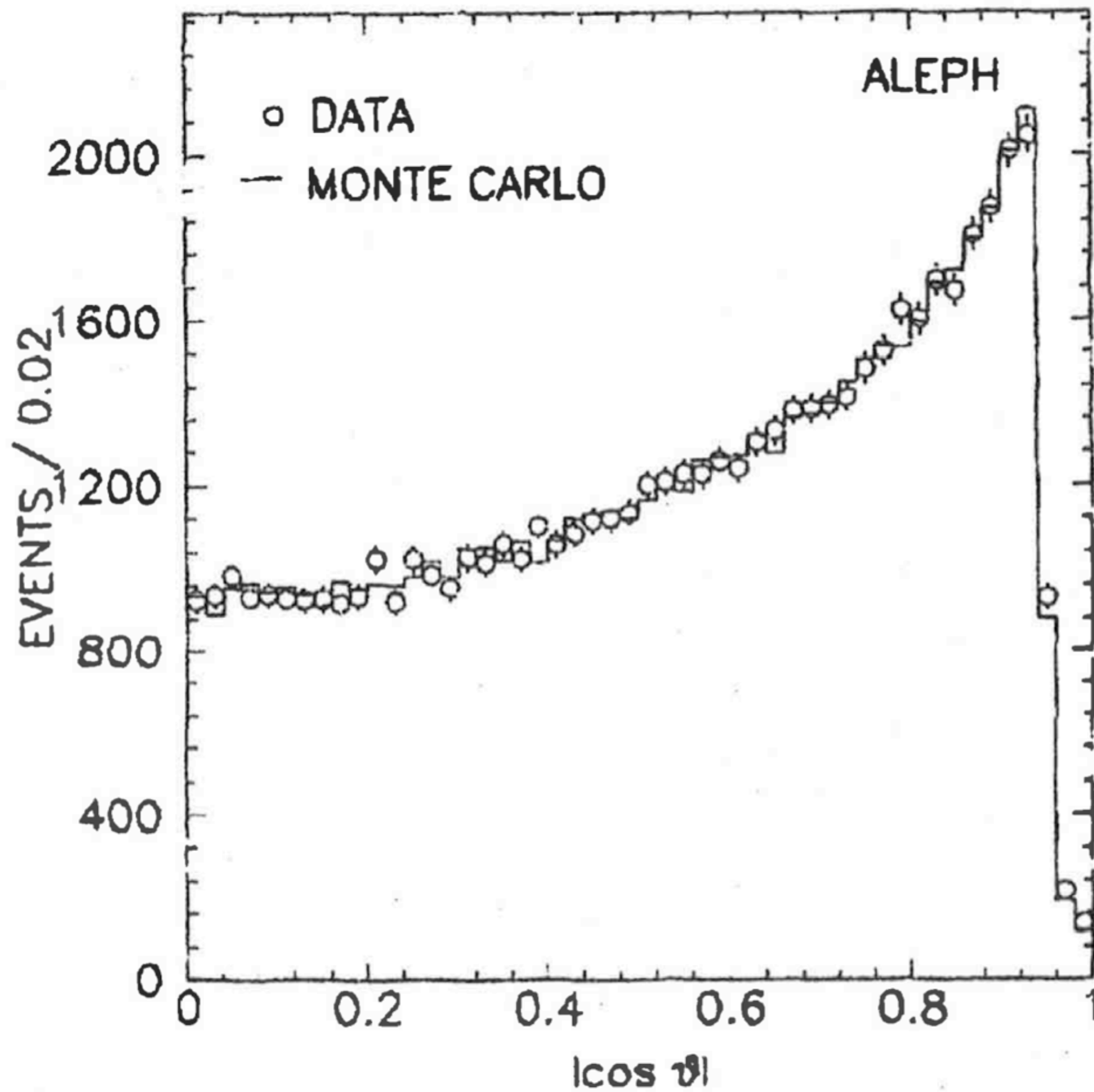
$$e^+e^- \rightarrow Z^0 \rightarrow \tau^+\tau^-$$



SLD



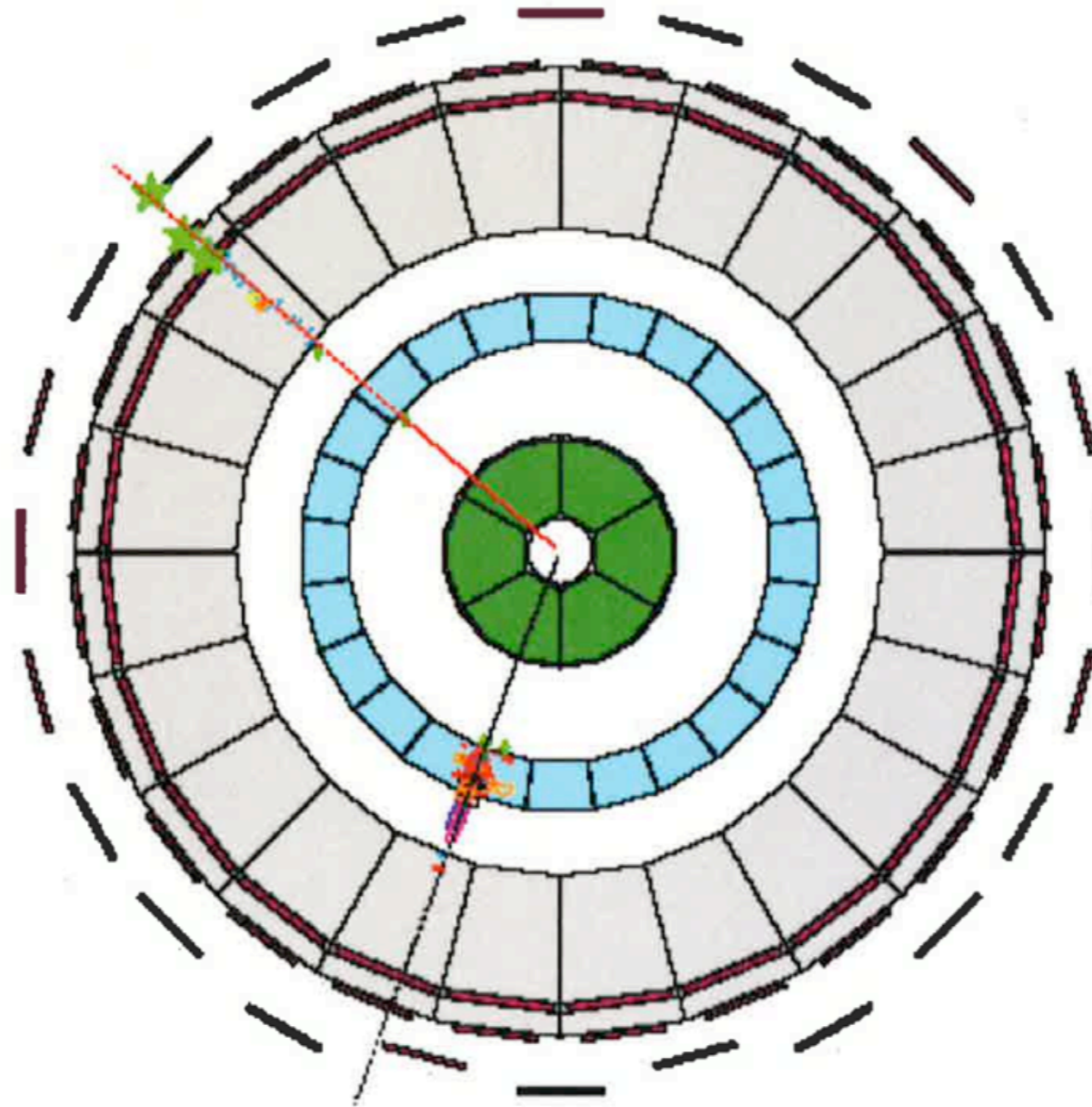
SLD



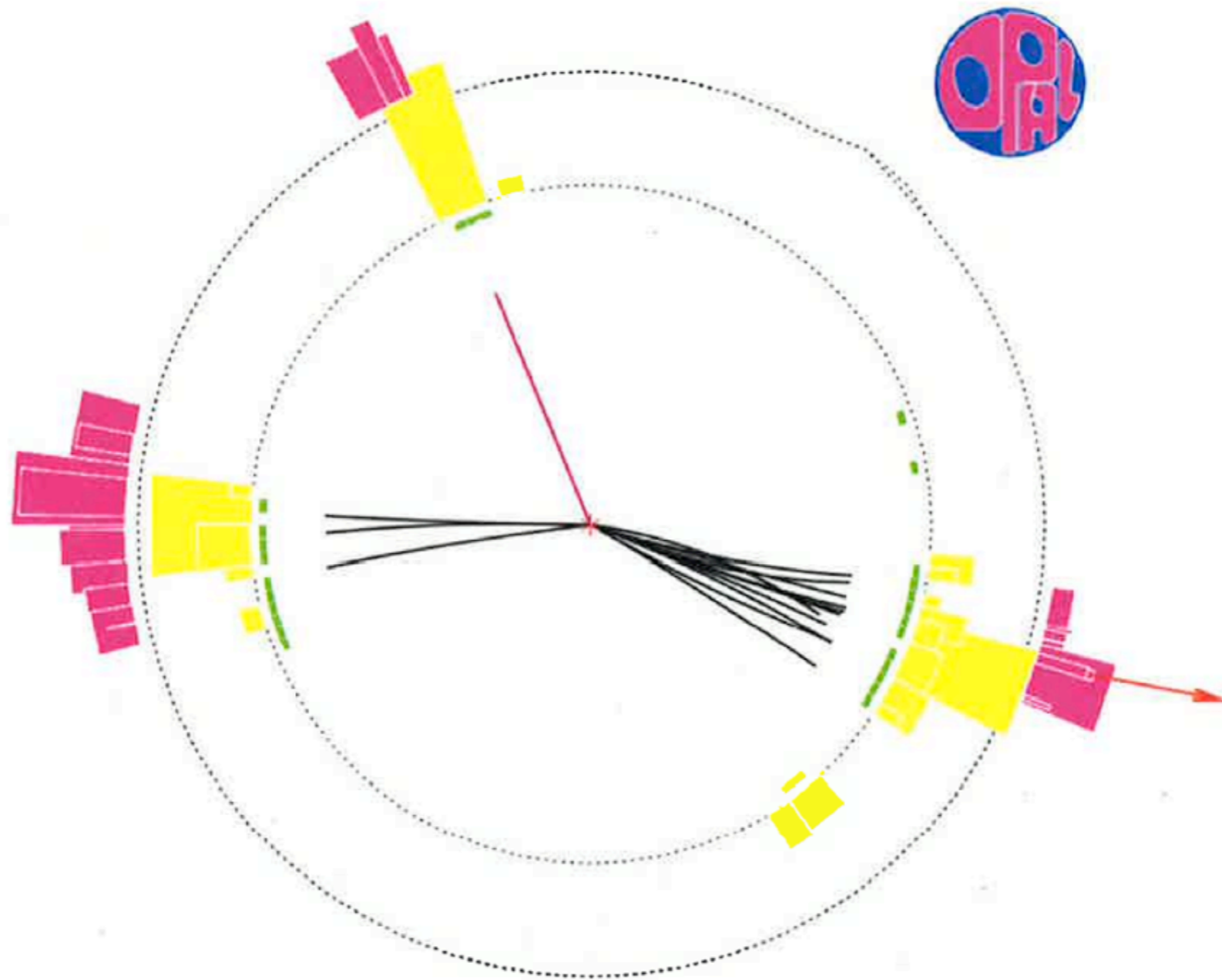
$$e^+ e^- \rightarrow W^+ W^-$$
$$\rightarrow e \bar{\nu} \mu \nu$$

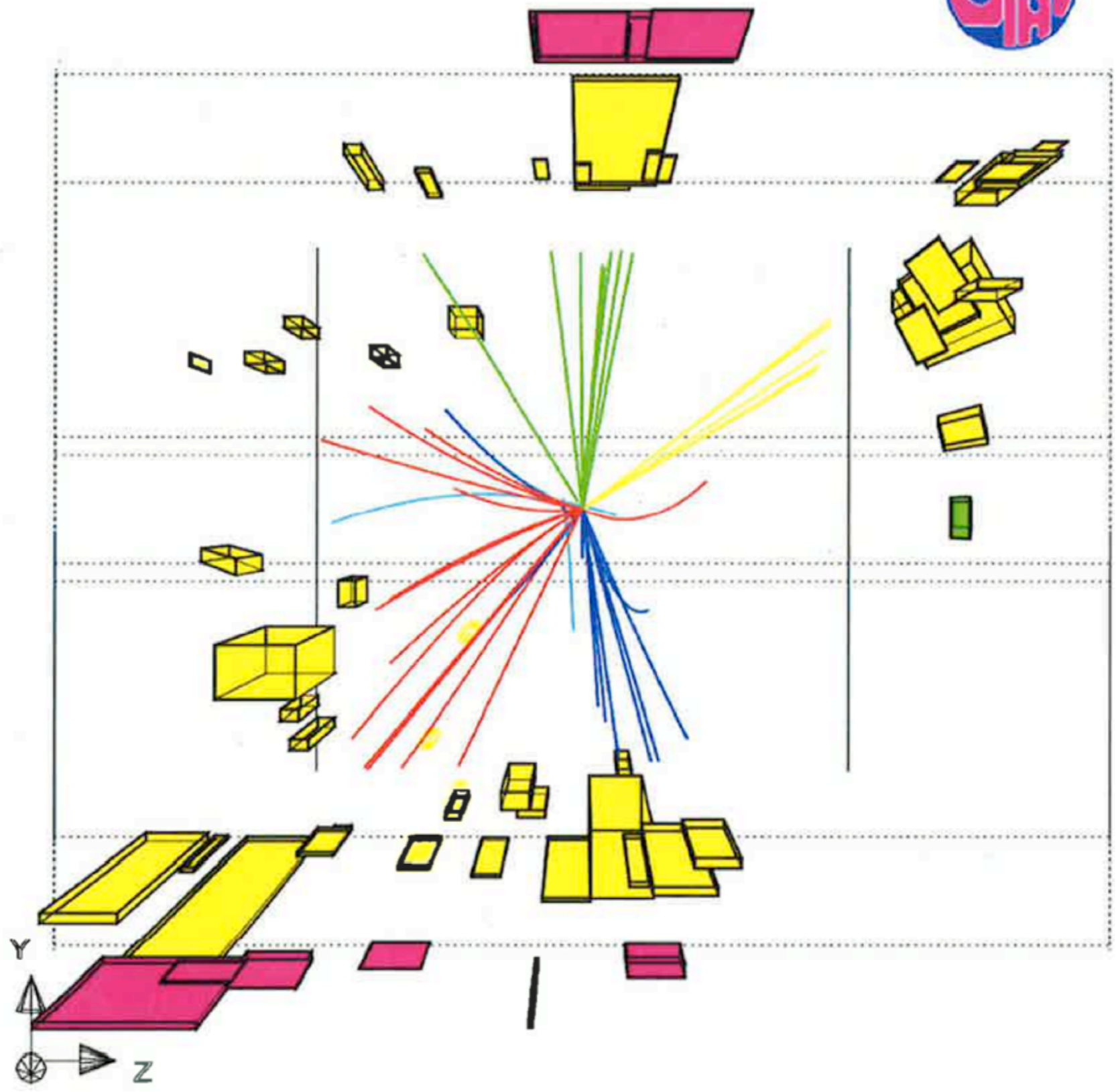


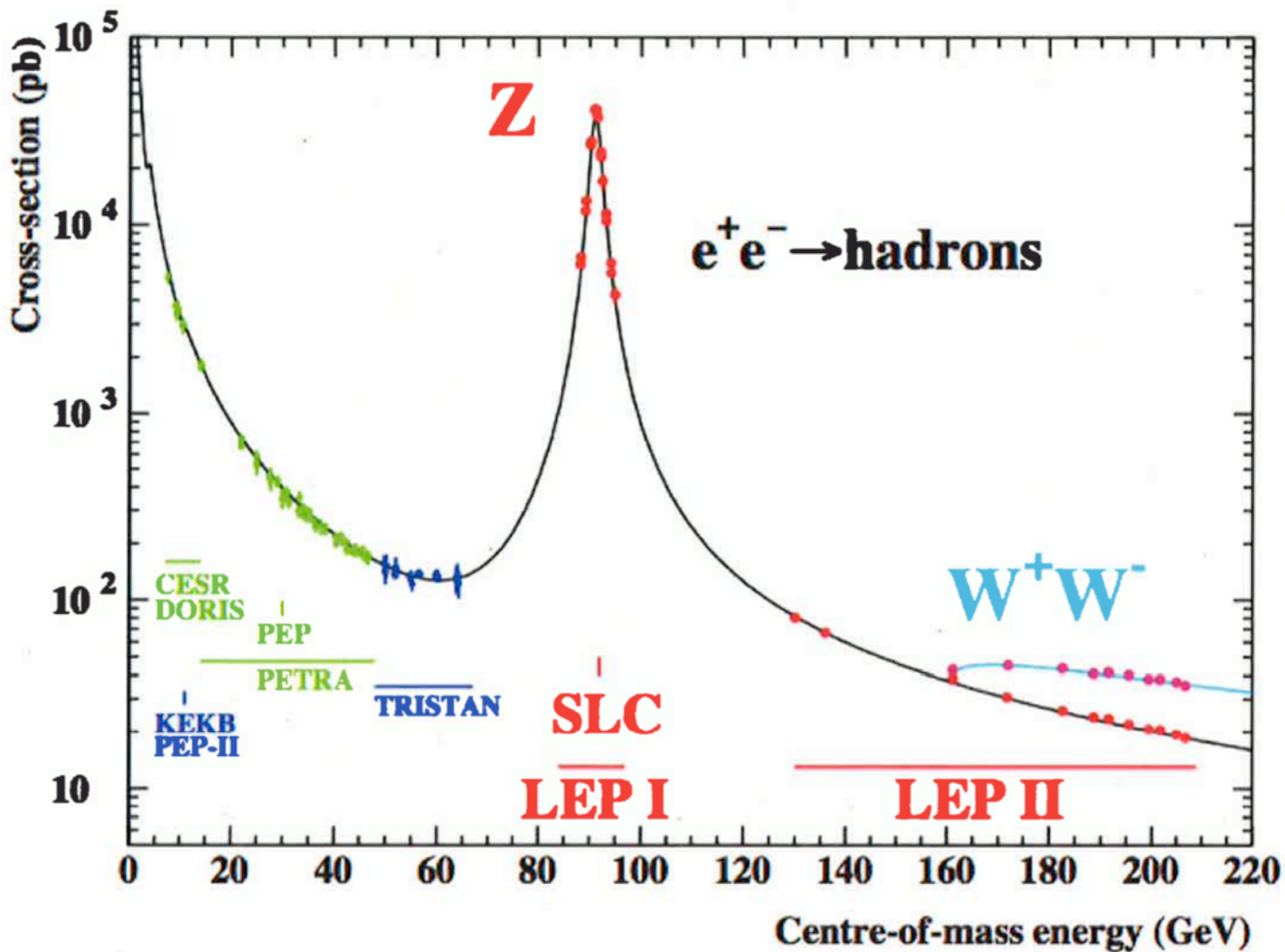
DELPHI

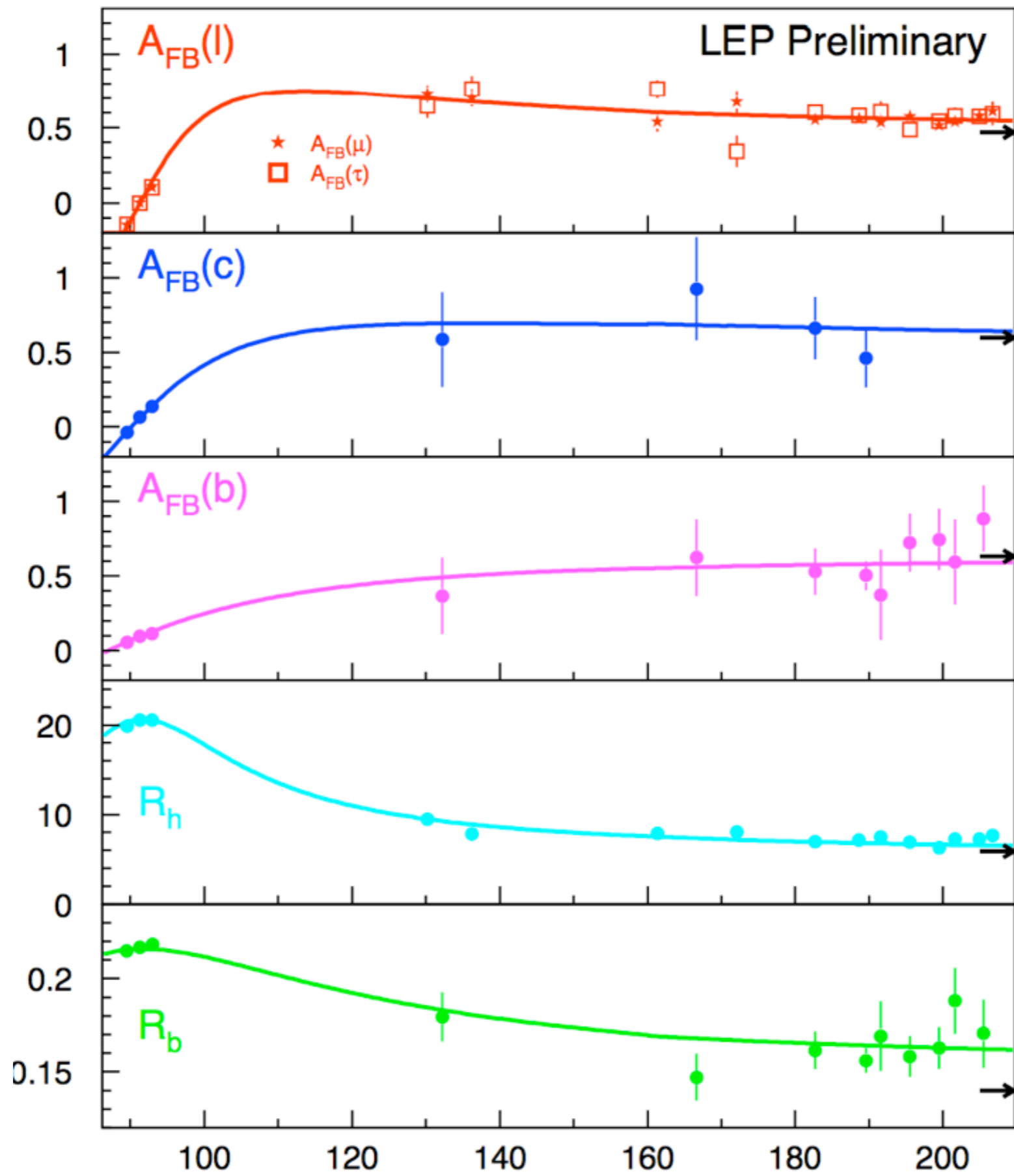


$$e^+e^- \rightarrow W^+W^- \rightarrow q\bar{q}\tau\nu$$

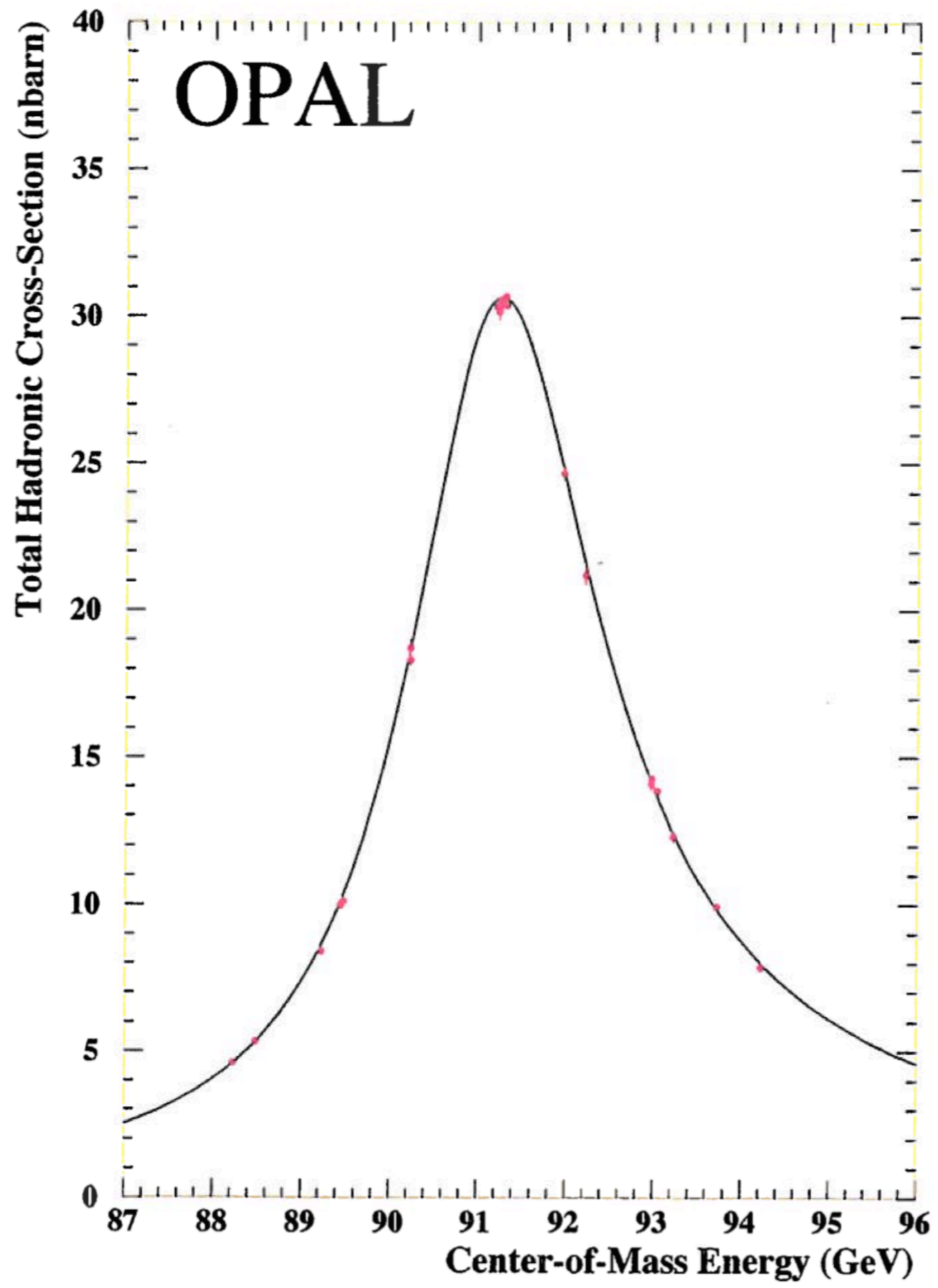


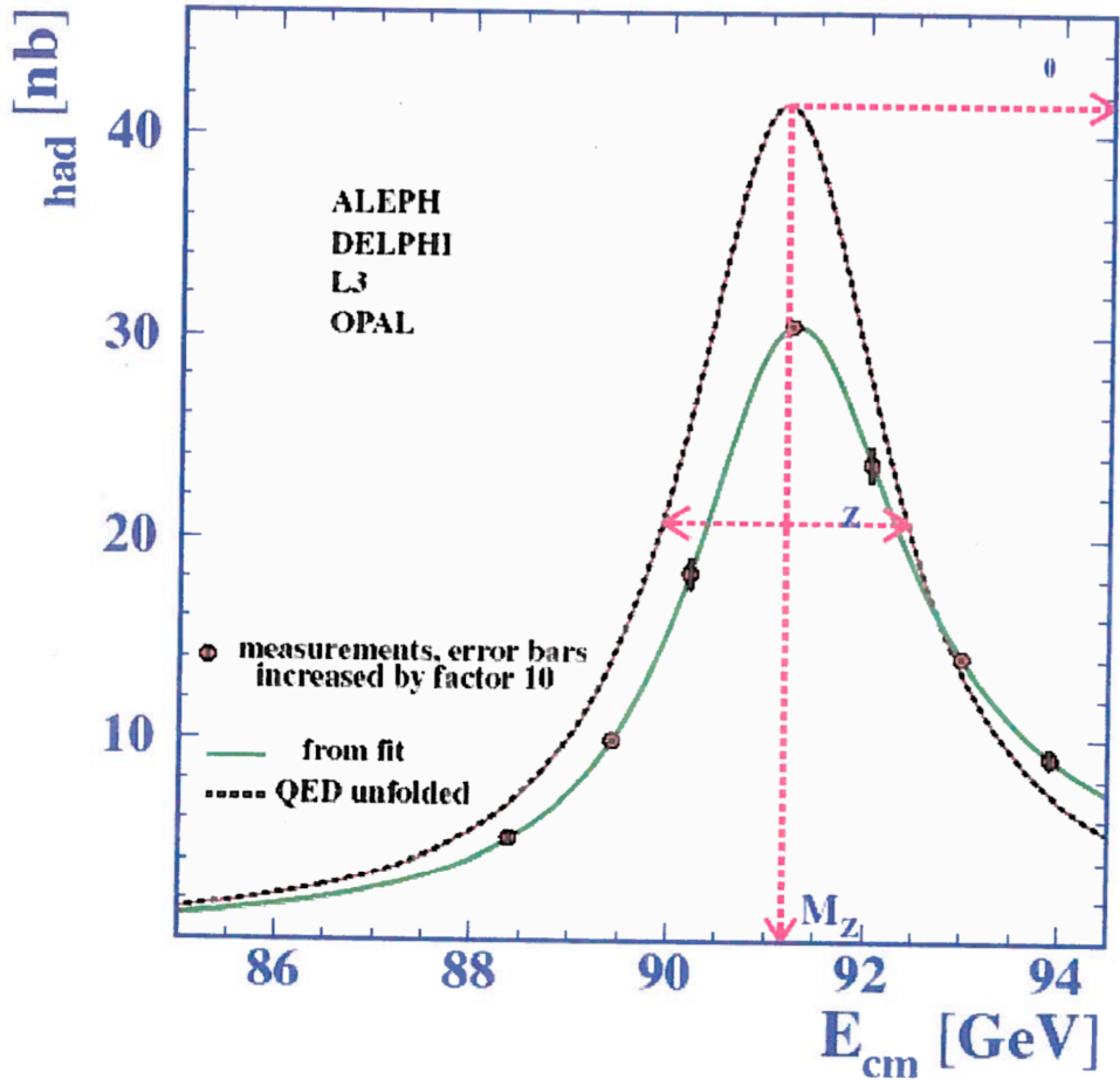


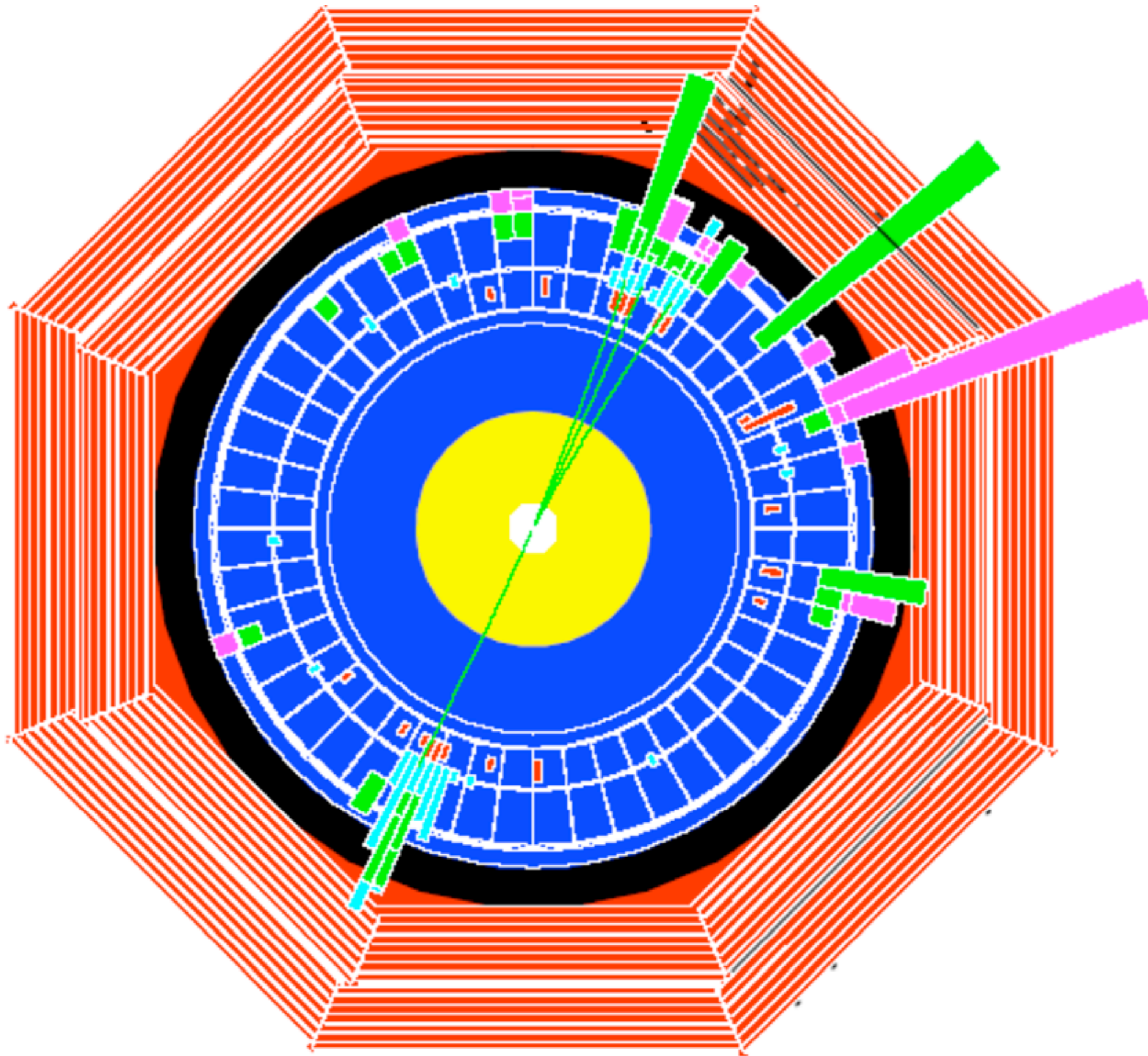




data compilation
by Hildreth

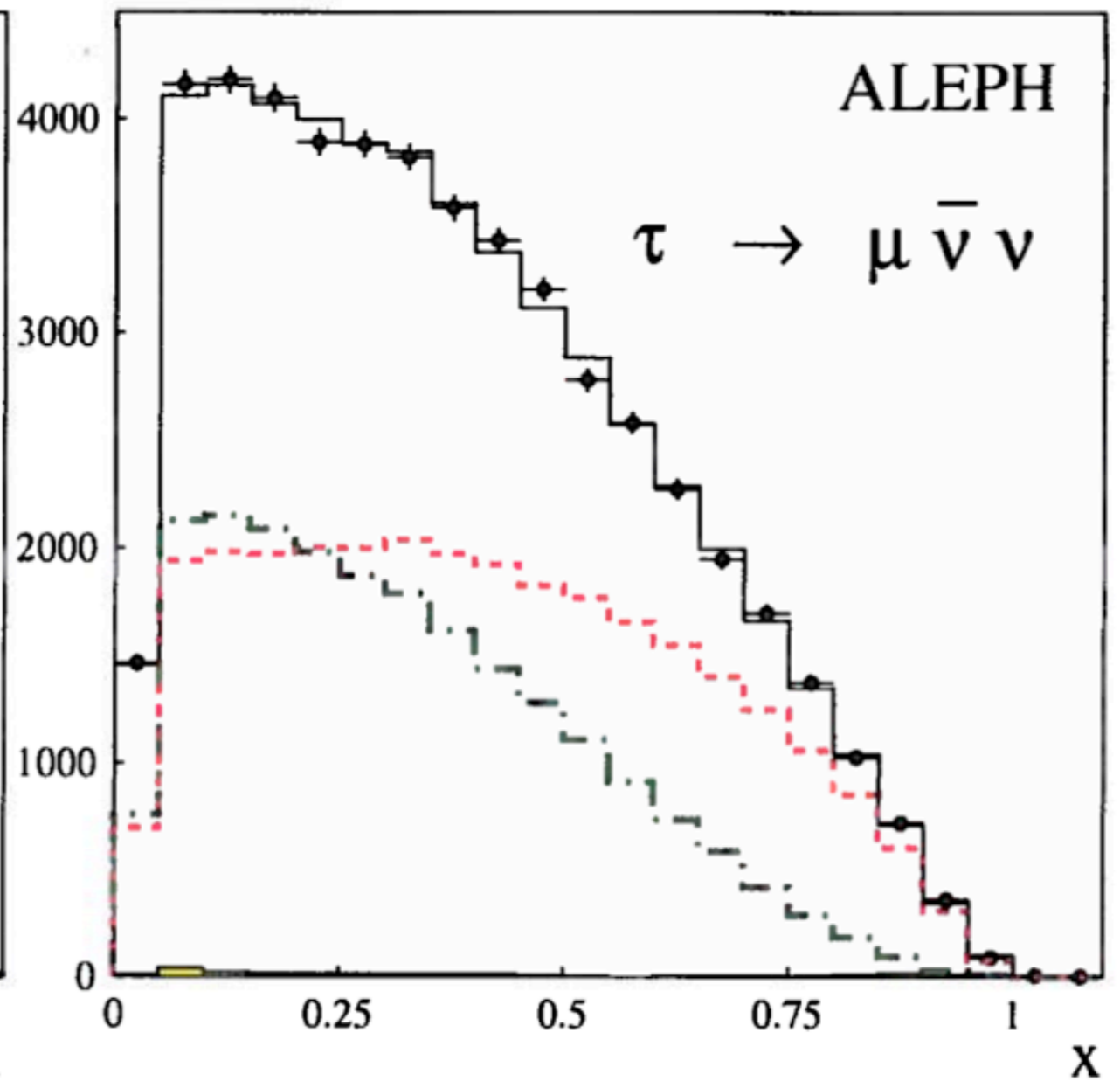
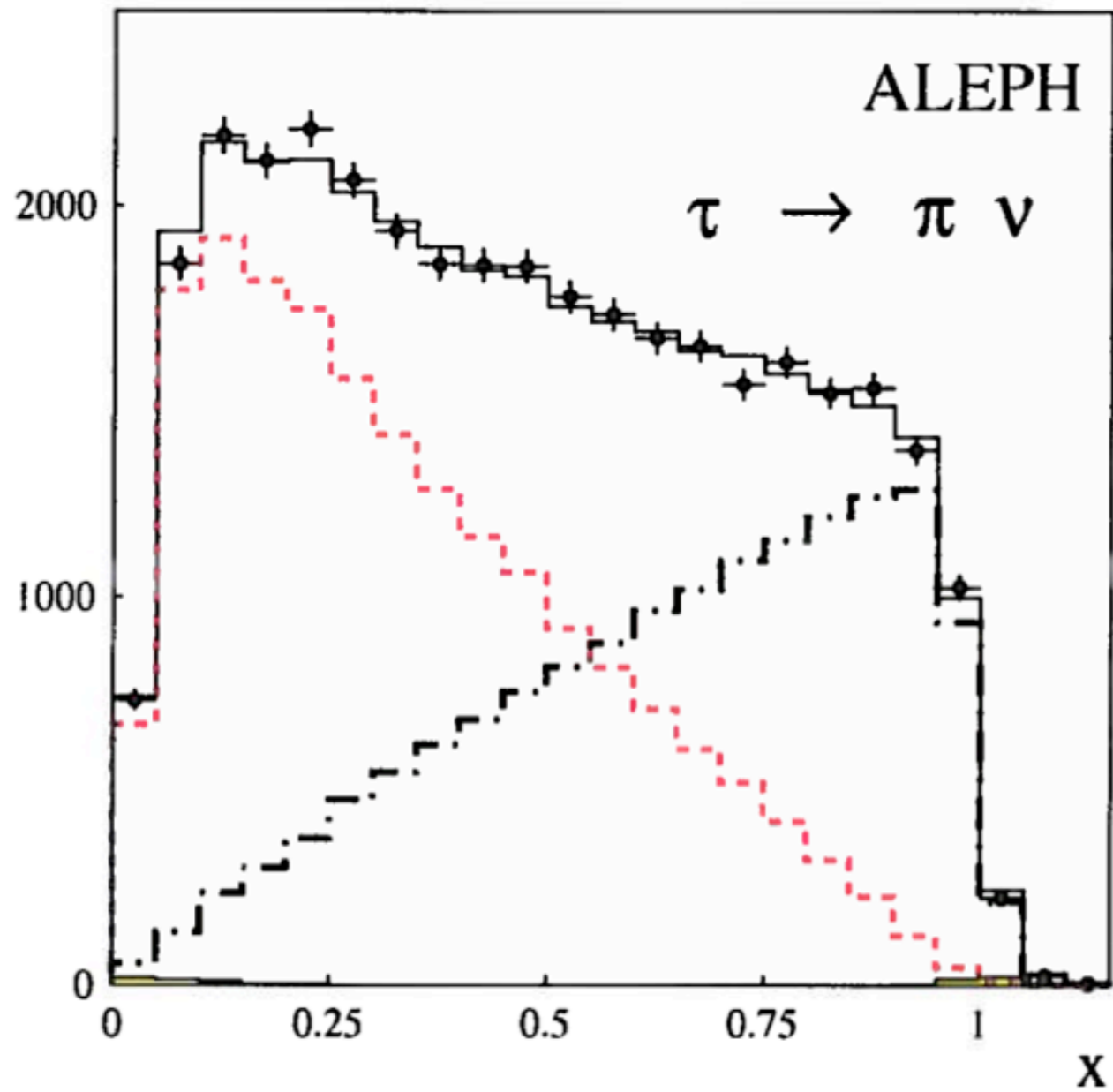






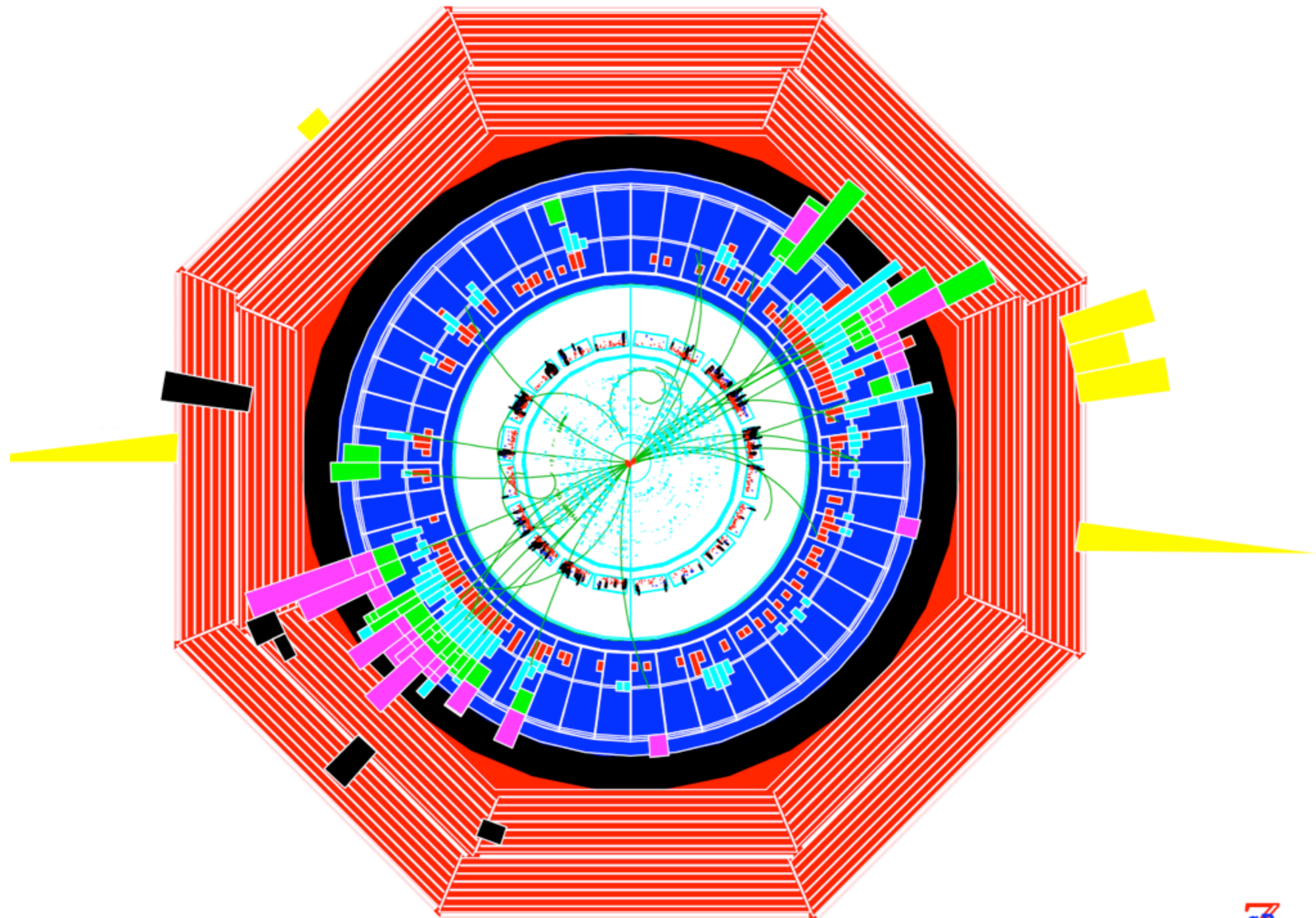
SLD

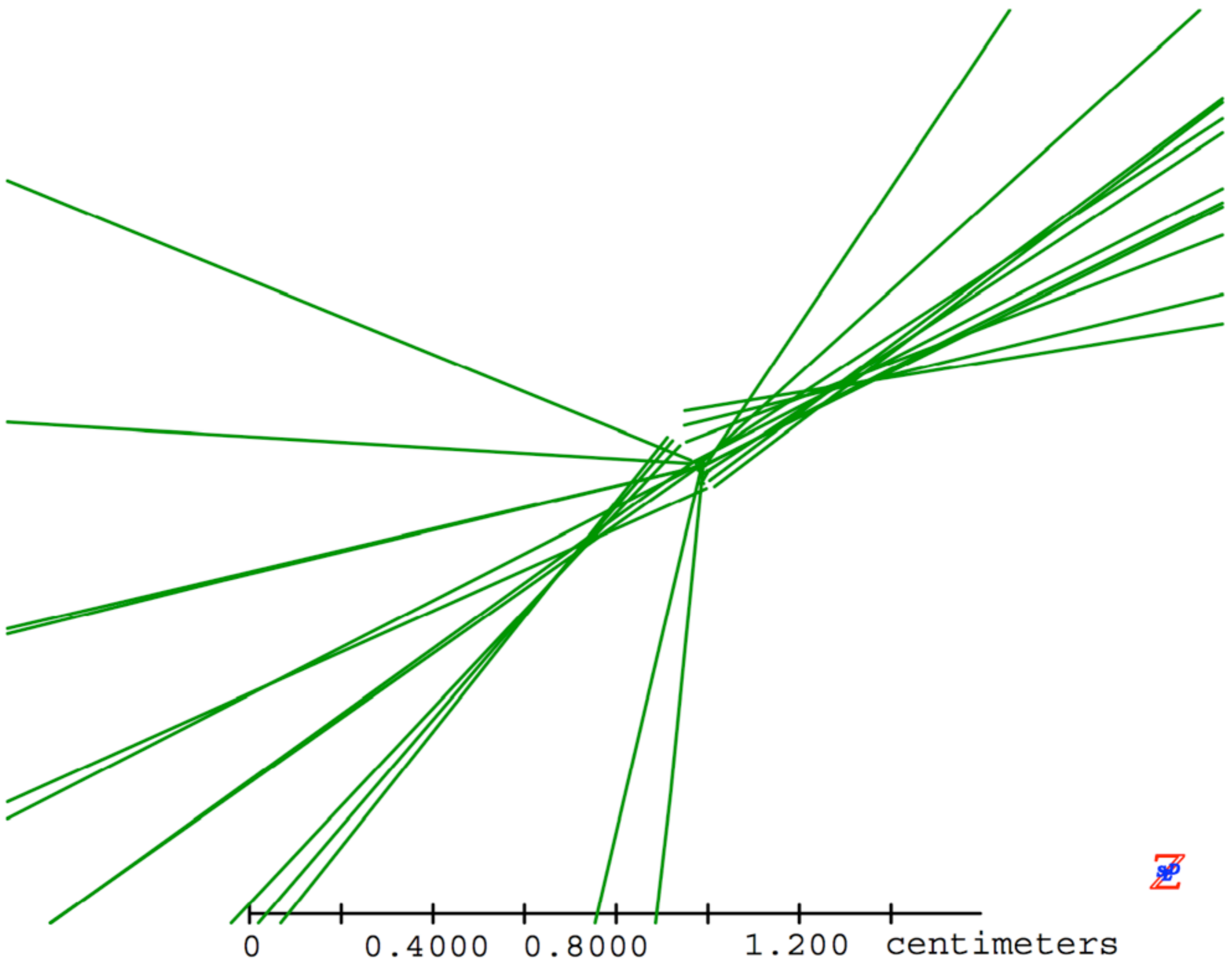
events/0.05

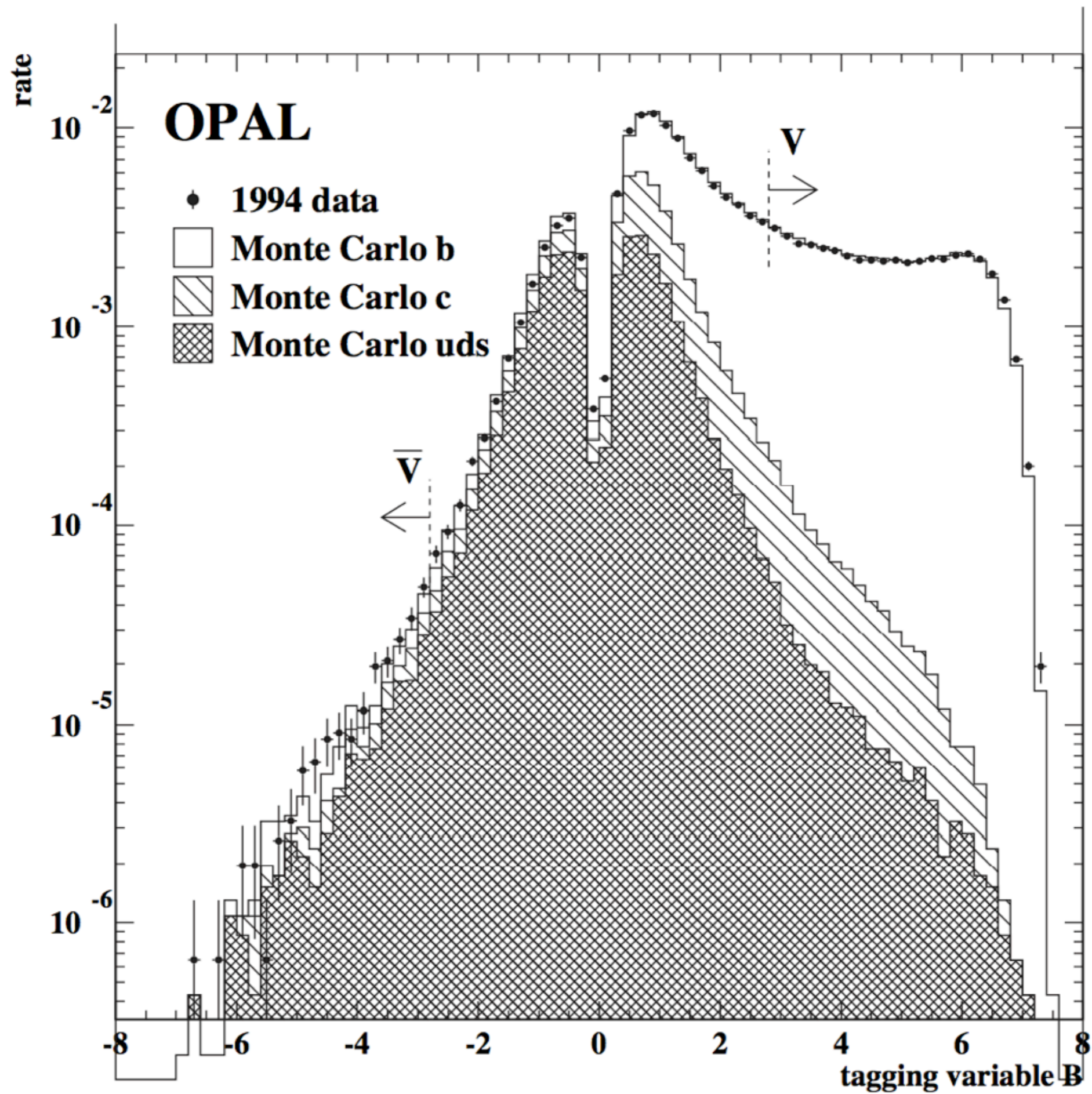


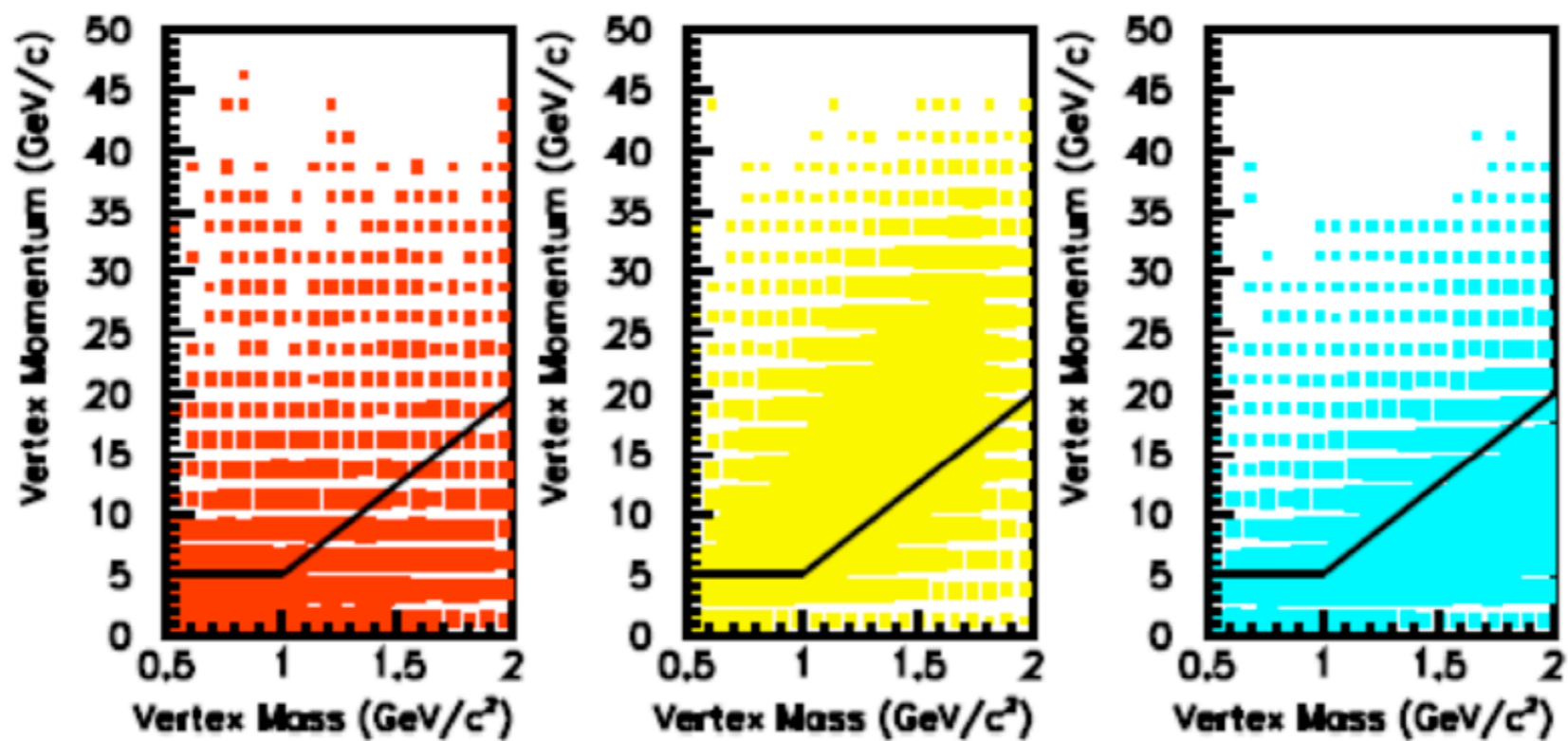
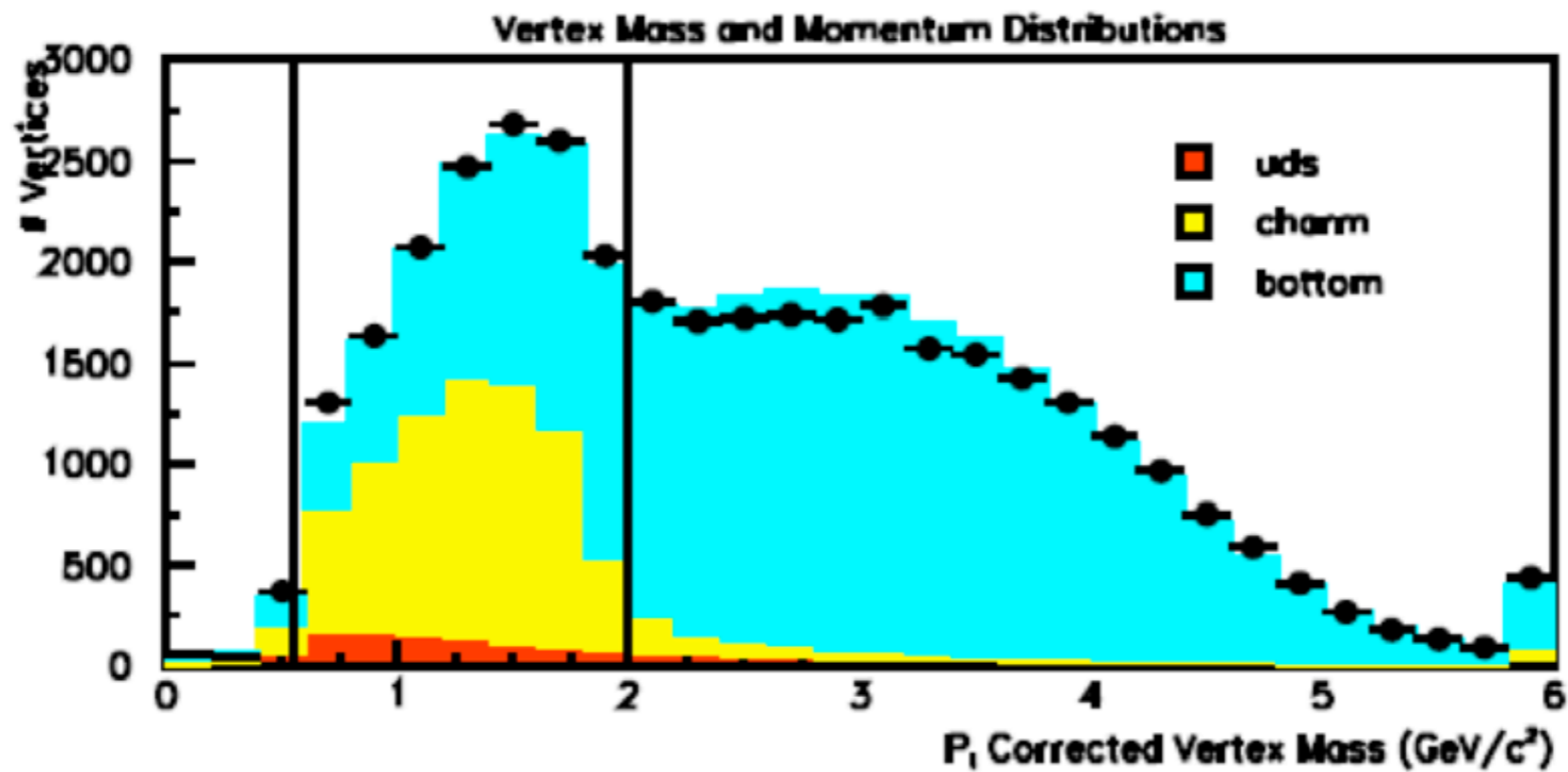
τ_L ---

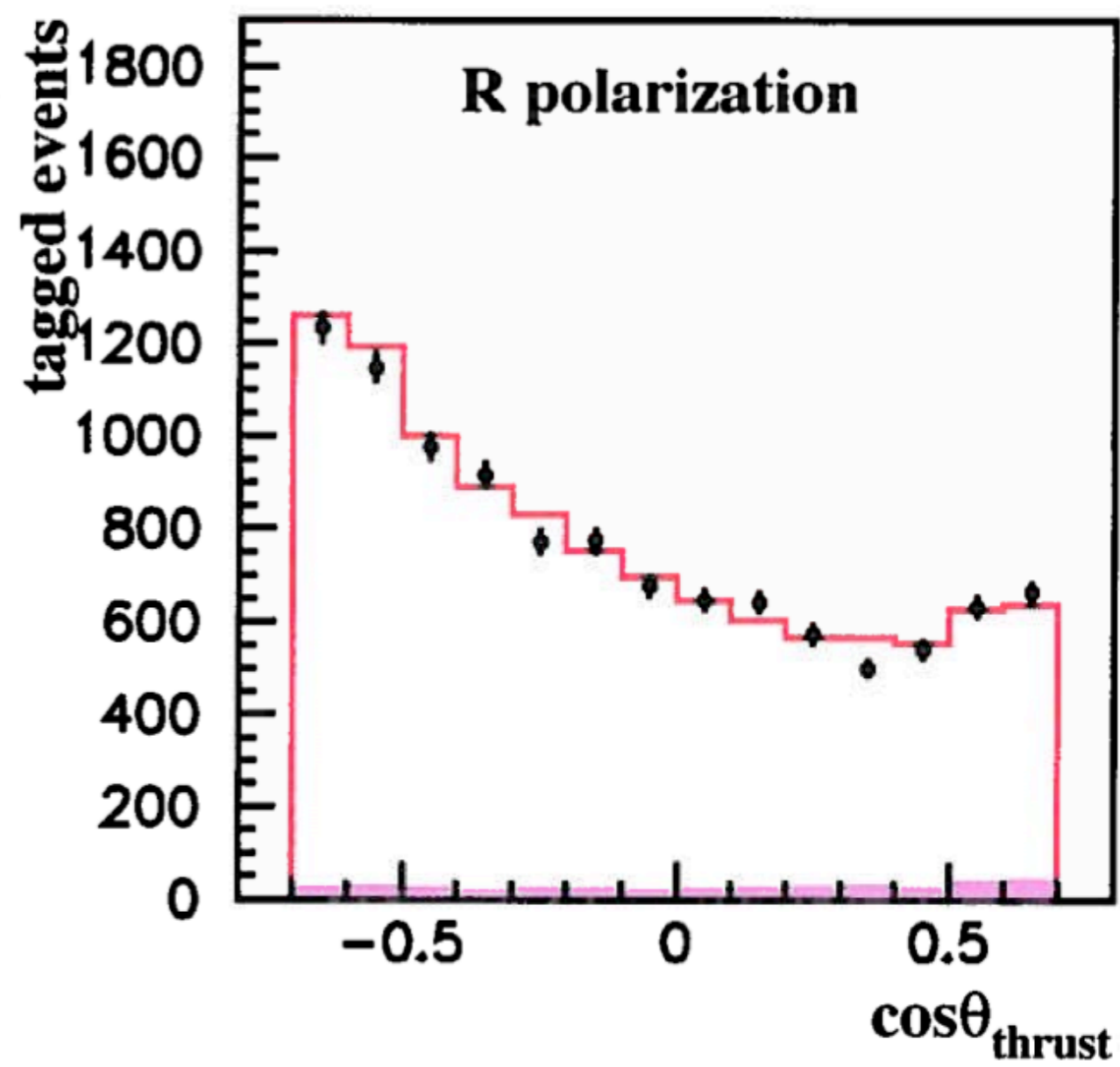
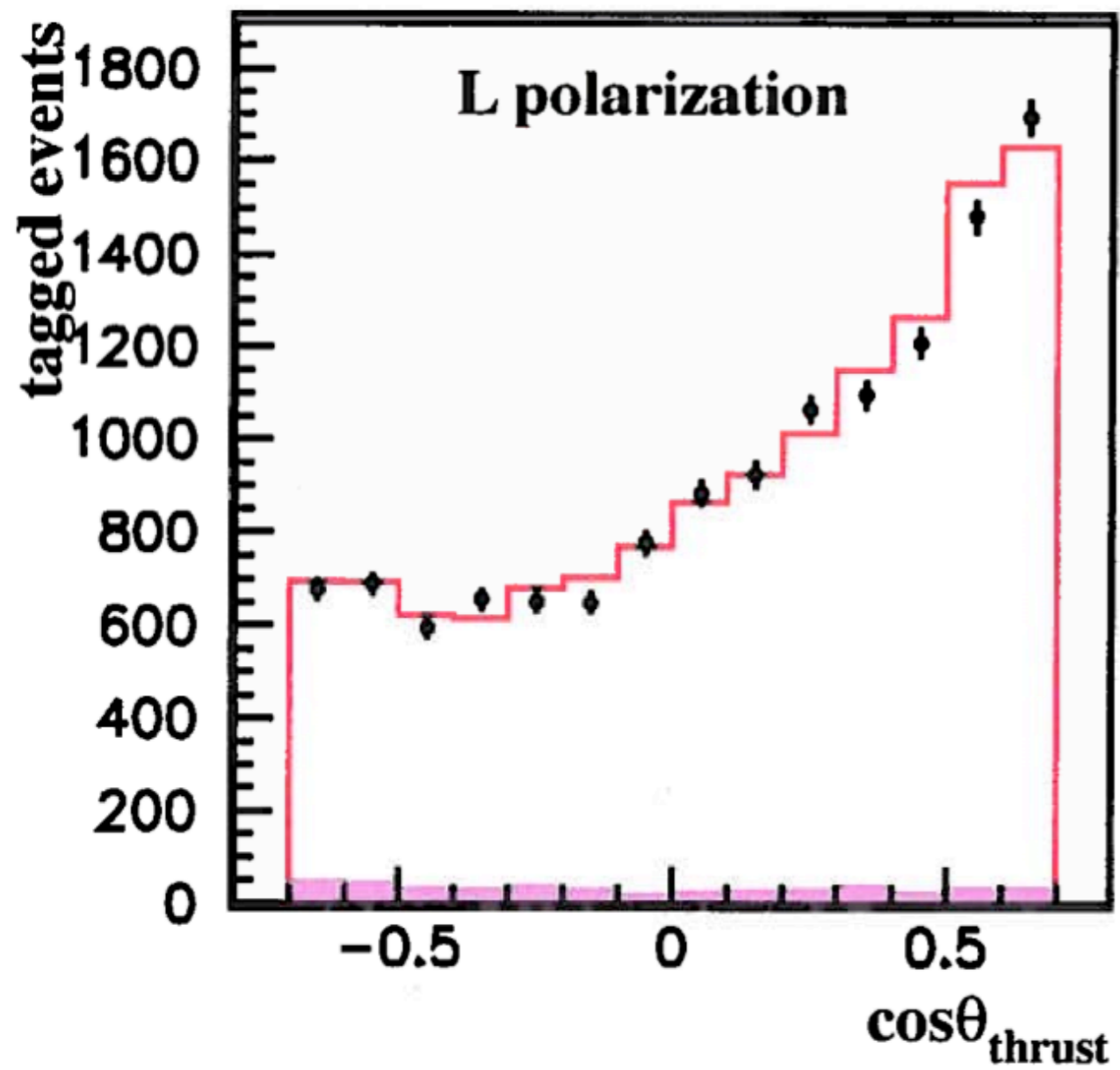
τ_R -.-



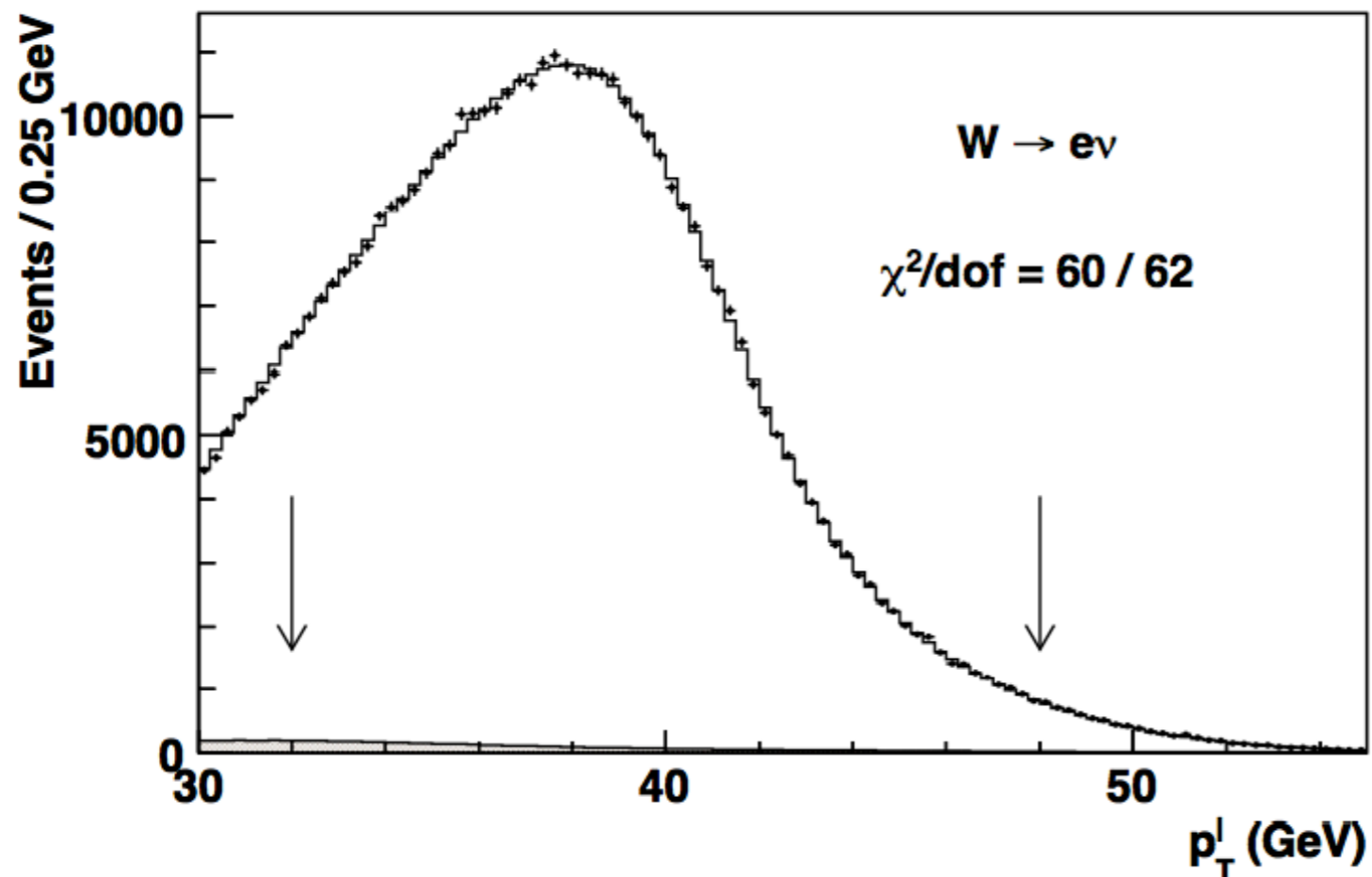
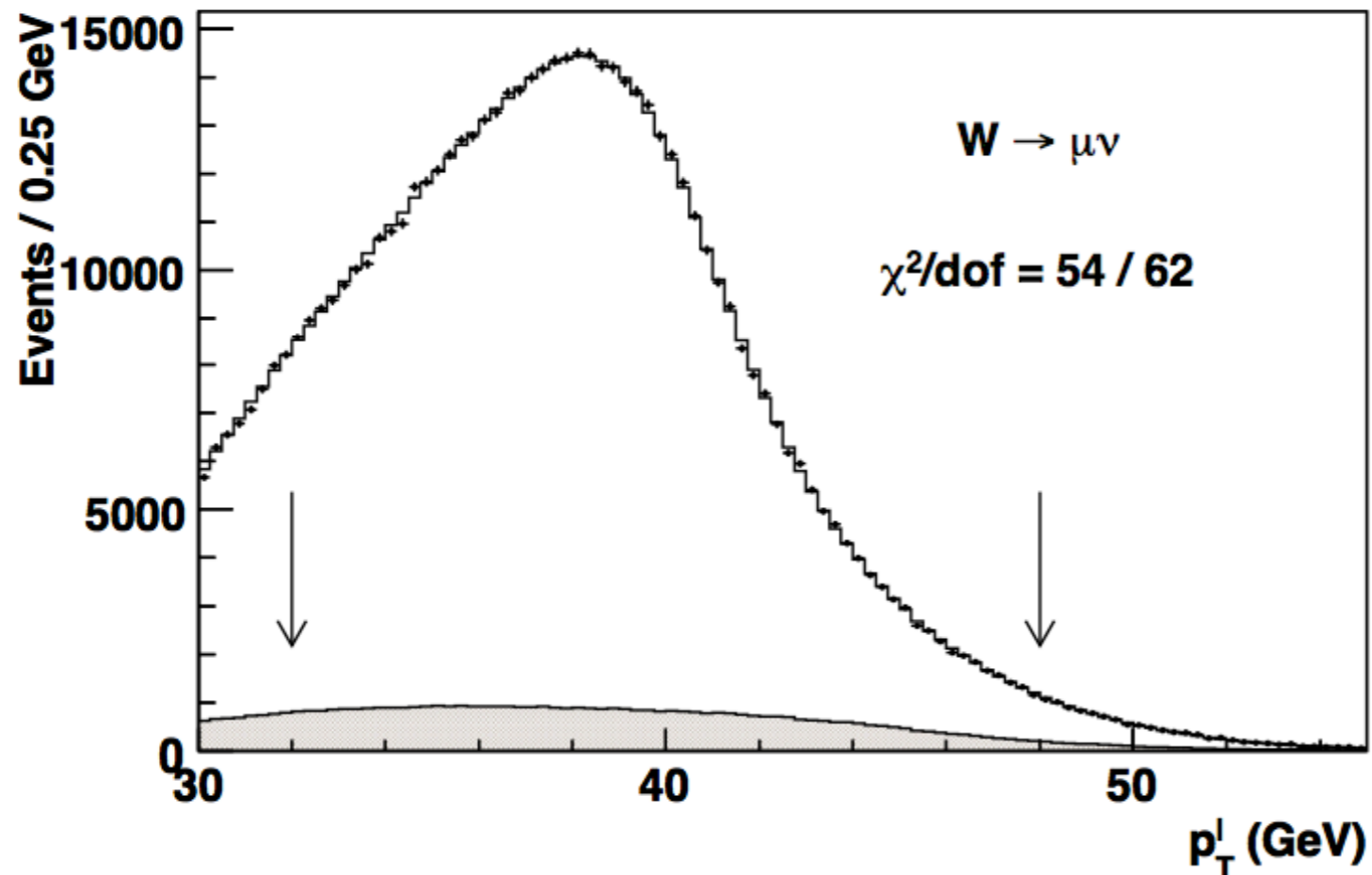




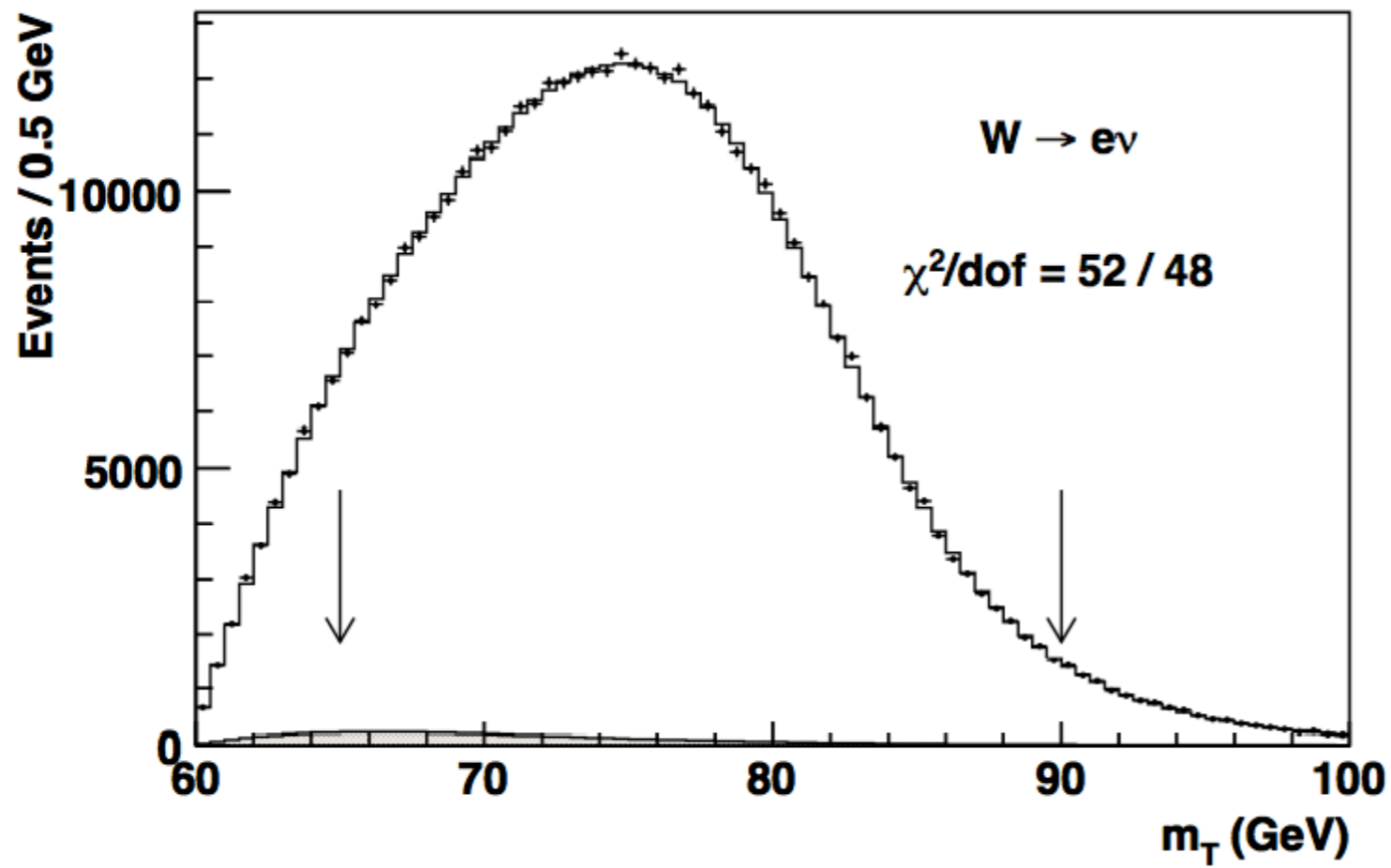
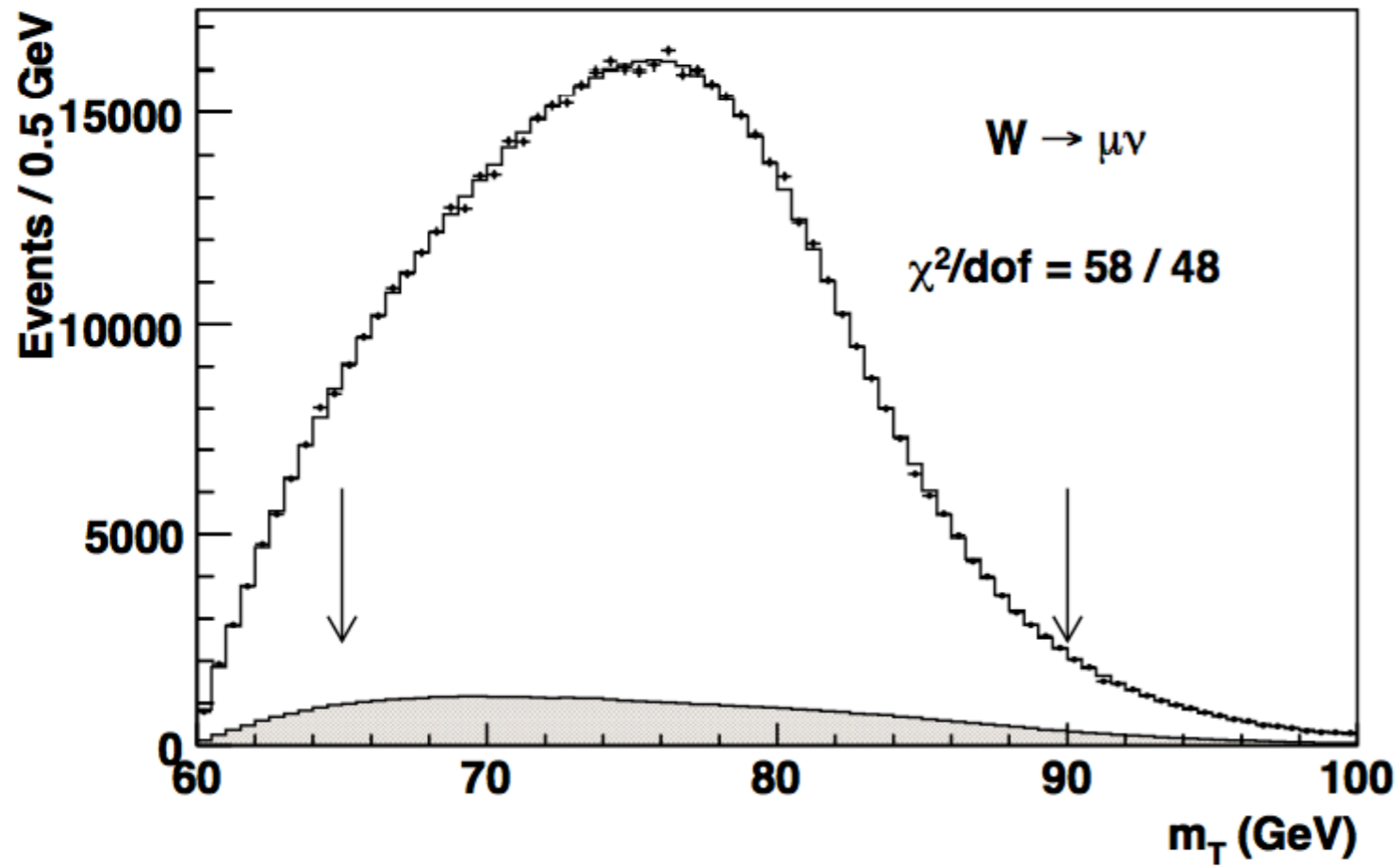




SLD experiment

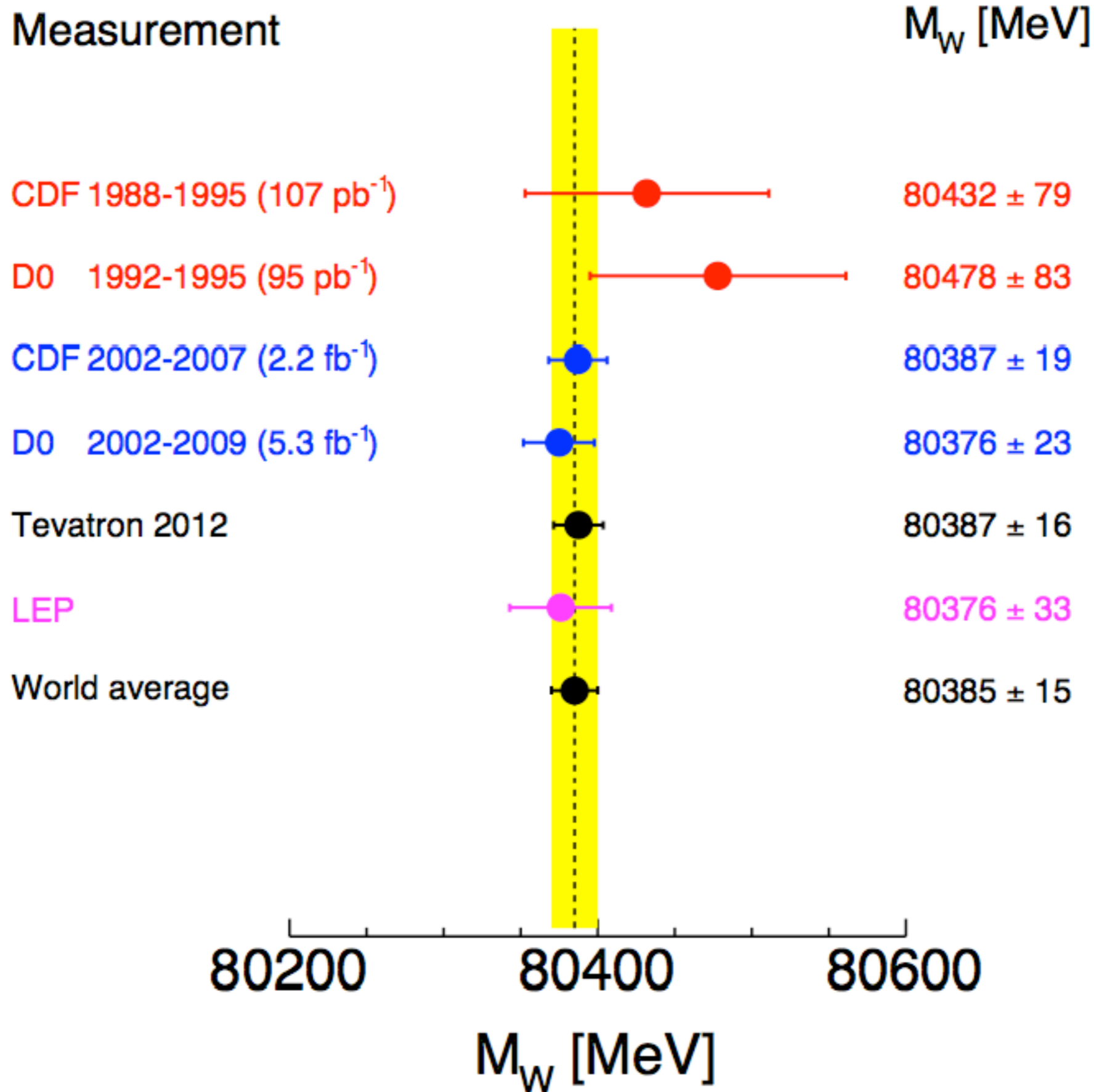


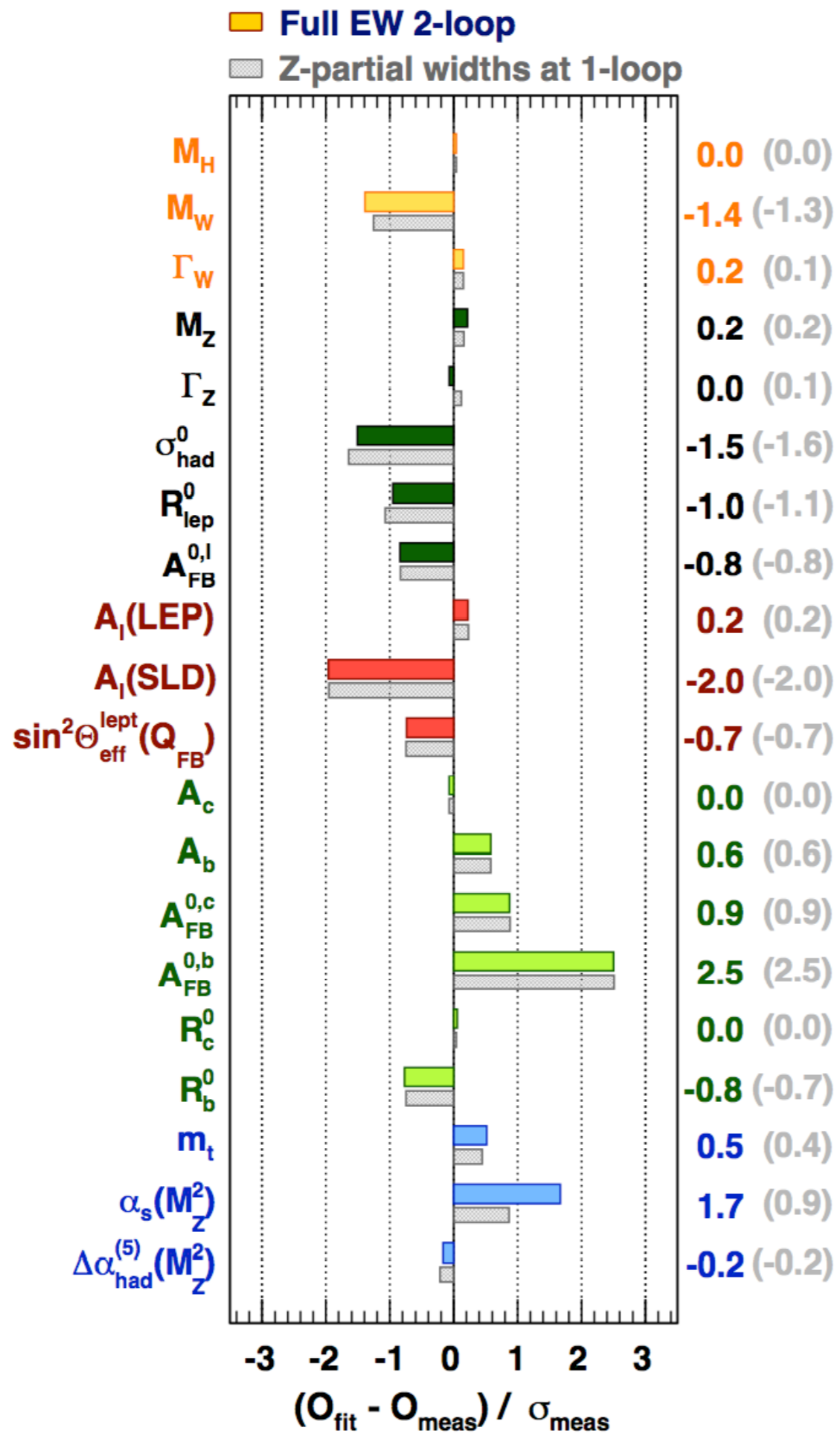
CDF experiment
2013



CDF experiment
2013

Mass of the W Boson





Gfitter 2014

