

Let's call off the war between 250 and 380.

(thanks to Phil Burrows, Junping Tian)

Higgs attitude:

The key goal for both ILC and CLIC is the precision study of the Higgs boson. Both 250 and 380 have advantages (see next slide); the choice is a matter of taste, and tactical necessity. The actual physics difference is very small.

Top attitude:

Precision study of top, especially the precision measurement of the mass and electroweak couplings, is an essential part of an e^+e^- program. Both ILC and CLIC proponents are committed to this. Again, the tactics are necessarily different.

Higgs discussion:

Advantages of 250:

more Higgs bosons for given integrated Lumi
this implies better BR measurements, deeper exotics
searches
much more accurate mh

advantages of 350:

better separation between Z and h in $e^+e^- \rightarrow Zh$ for
hadronic Z's improves $\sigma(Zh)$
use of WW fusion \rightarrow h channel
better $e^+e^- \rightarrow WW$ measurements, because of the
higher energy

ILC 250

CLIC 350

coupling	2/ab-250 pol.	2/ab-350 e^-
HZZ	0.50	0.60
HWW	0.50	0.58
Hbb	0.99	1.1
$H\tau\tau$	1.1	1.3
Hgg	1.6	1.7
Hcc	1.8	2.3
$H\gamma\gamma$	1.1	1.2
$H\gamma Z$	9.1	8.9
$H\mu\mu$	4.0	4.0
Γ_{tot}	2.3	2.4
Γ_{inv}	0.36	0.58
Γ_{other}	1.6	1.6