

Suggested increase of MC statistics

Mikael Berggren¹

¹DESY, Hamburg

ILD phone meeting Meeting, November 7, 2012

Future needs - Current status

- **First priority is any requests from the Benchmark analyses.**
- Current and future (non-benchmark) analyses are mostly at 500 GeV

Hence, whenever resources are free, increase 500 GeV SM statistics.
Right now, at 500 GeV:

- 6f: $> 500 \text{ fb}^{-1}$
- 2f and 4f: 50 fb^{-1}
- $\gamma\gamma$, Compton etc: Nothing.

Suggestion

Suggestion:

- 6f: Nothing, already OK.
- 2f and 4f: increase to 150 fb^{-1} ie. 3 times more
- $\gamma\gamma$, Compton etc:
 - Huge cross-sections \Rightarrow Can't make samples of sensible for analysis.
 - Use SGV for this.
 - However, sizable samples needed for eg. BCAL and SGV parametrisation, cross-checks of fast-sim etc.
 - Do 1 M events of each aa_2f, ae/ea_1f and ae/ea_3f
- ae/ea_5f and aa_4f : Do 500 fb^{-1}

In numbers

New events to simulate and reconstruct:

- 2f: 2.2 M events
- 4f: 2.2 M events
- 6f: 0
- aa_2f, ae/ea_1f and ae/ea_3f : 3 M events
- ae/ea_5f and aa_4f : 165 000 events.

Total request

7.5 Million events, about half low activity ones.