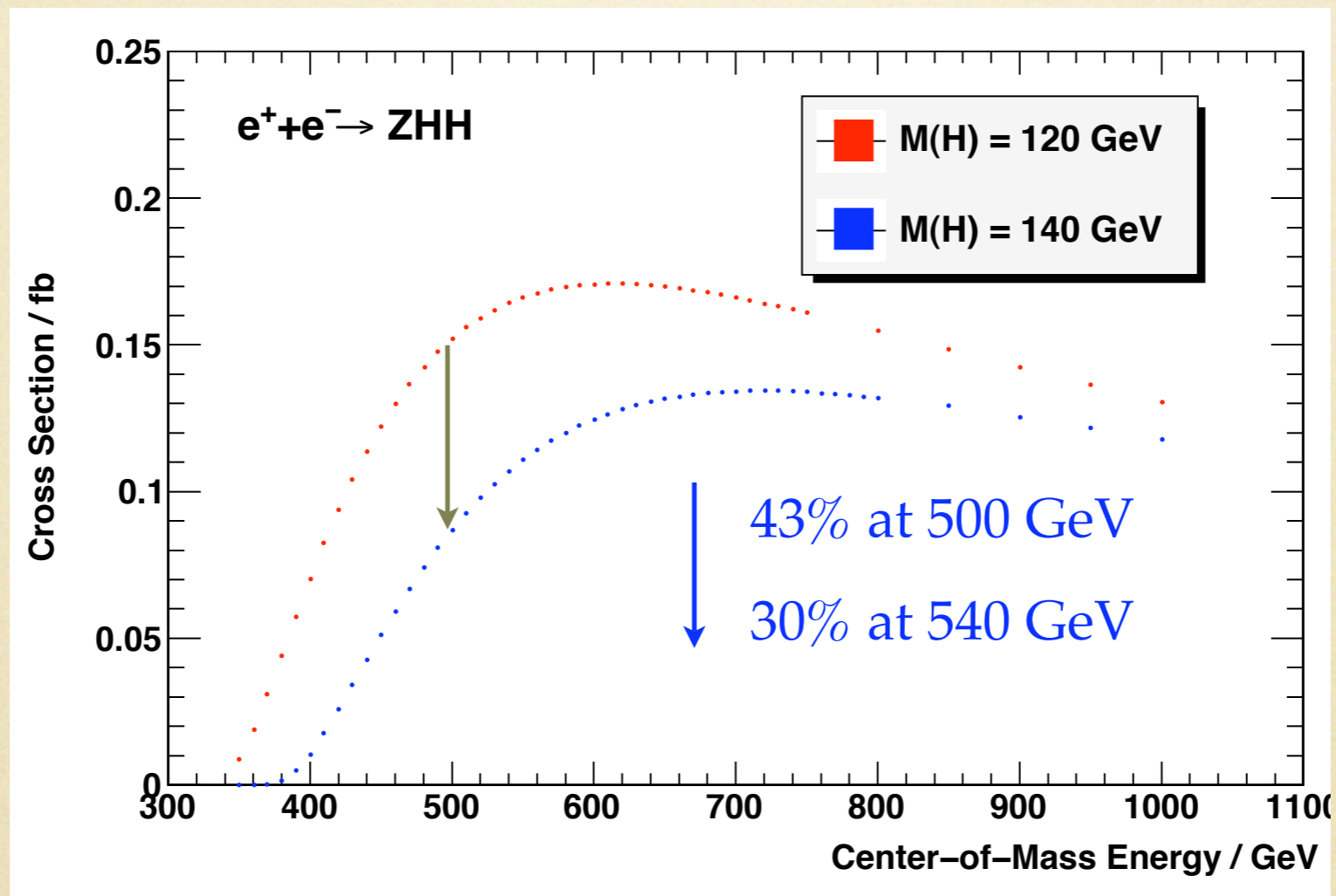


Higgs Self-coupling
measurement in case of a
140 GeV Higgs

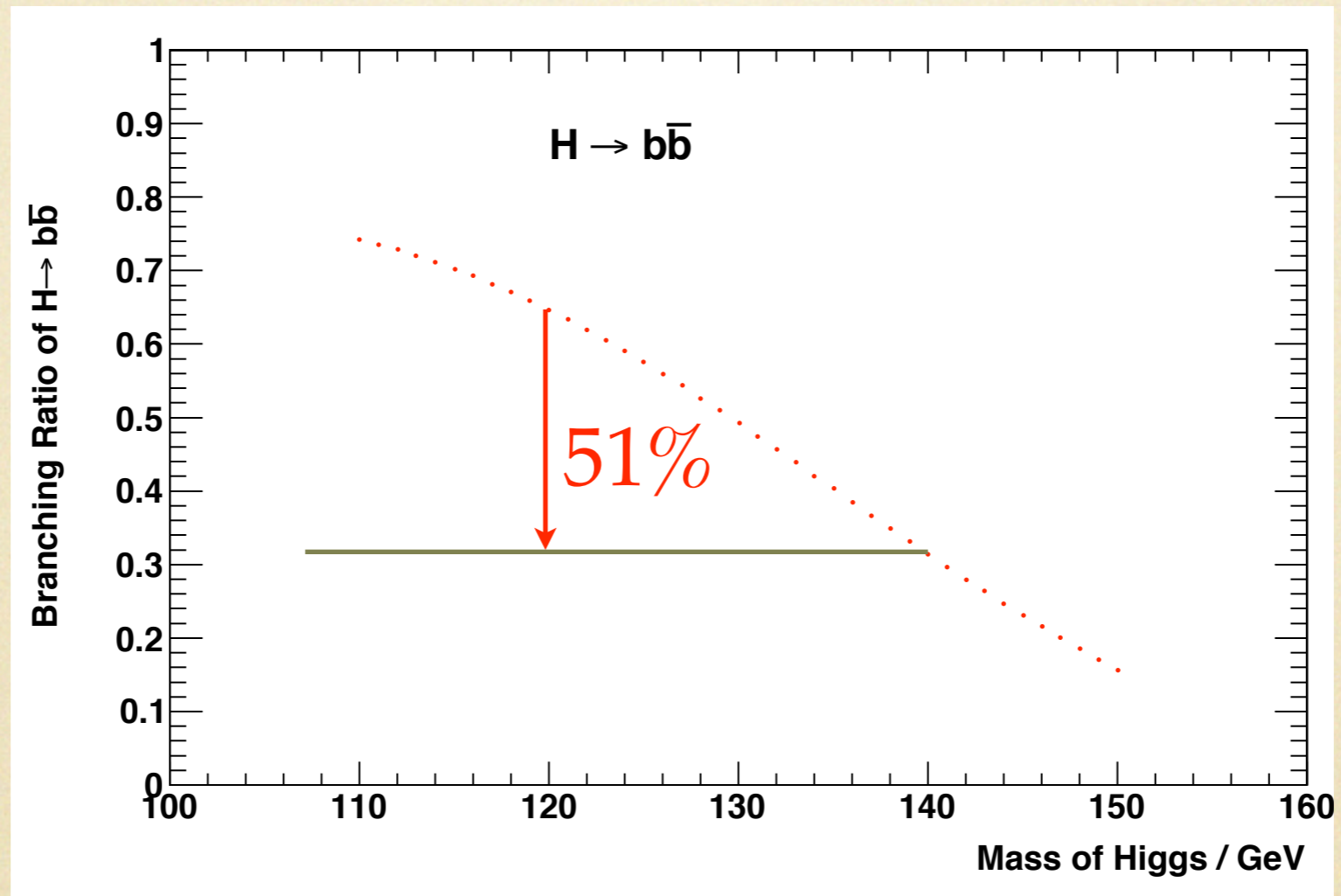
Cross Section of ZHH



calculated by Physsim (no polarization)

500 GeV Beamstrahlung data used

Branching Ratio of $H \rightarrow b\bar{b}$



calculated by HDecay

Expected number of events of
 $e^+e^- \rightarrow ZHH \rightarrow Z + 4 \text{ b-jet}$

$$\int L dt = 2 \text{ ab}^{-1}$$

Ecm	P(e-,e+)	M(H)=120GeV (~42%)	M(H)=140GeV (~10%)
500 GeV	(0.,0.)	127	17
	(-0.8,+0.3)	180	24
540 GeV	(0.,0.)	137	21
	(-0.8,+0.3)	194	30

challenge!

we have to consider $H \rightarrow WW^*$, ~50% for 140 GeV