

Snowmass 2021 Higgs Factory Study Scenarios

Collider	Type	\sqrt{s}	$\mathcal{P}[\%]$ e^-/e^+	\mathcal{L}_{int} ab^{-1}
HL-LHC	pp	14 TeV		6
ILC and C ³ c.o.m almost similar	ee	250 GeV	$\pm 80 / \pm 30$	2
		350 GeV	$\pm 80 / \pm 30$	0.2
		500 GeV	$\pm 80 / \pm 30$	4
		1 TeV	$\pm 80 / \pm 20$	8
CLIC	ee	380 GeV	$\pm 80 / 0$	1
		1.5 TeV	$\pm 80 / 0$	2.5
		3.0 TeV	$\pm 80 / 0$	5
CEPC	ee	M_Z		16
		$2M_W$		2.6
		240 GeV		5.6
FCC-ee	ee	M_Z		150
		$2M_W$		10
		240 GeV		5
		$2 M_{\text{top}}$		1.5
muon-collider (higgs)	$\mu\mu$	125 GeV		0.02

Snowmass 2021 EF Discovery Collider Scenarios

Collider	Type	\sqrt{s}	\mathcal{L}_{int} ab^{-1}
HE-LHC	pp	27 TeV	15
FCC-hh	pp	100 TeV	30
LHeC	ep	1.3 TeV	1
FCC-eh	ep	3.5 TeV	2
High energy muon-collider	$\mu\mu$	3 TeV	1
		10 TeV	10
		30 TeV	10