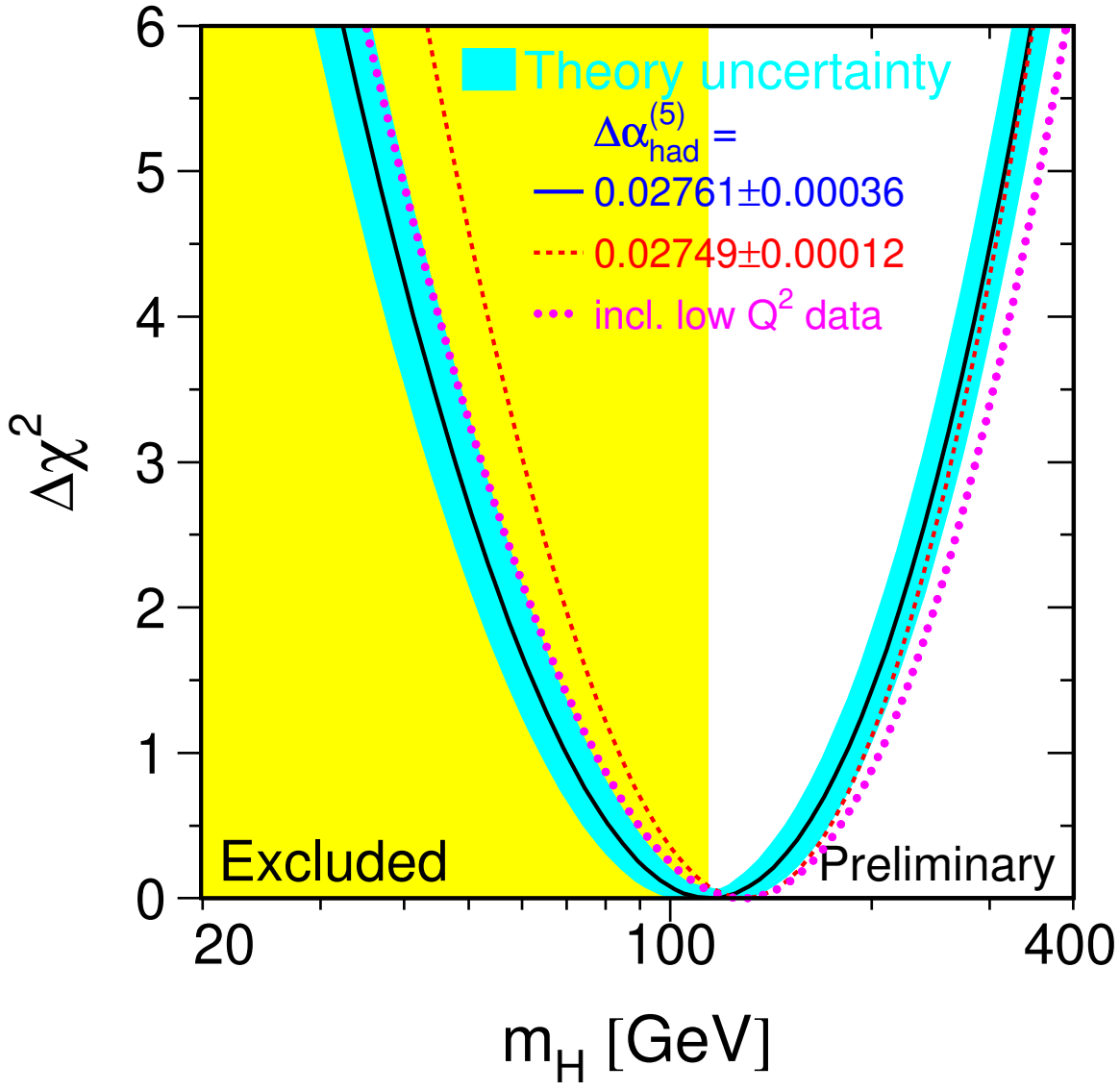
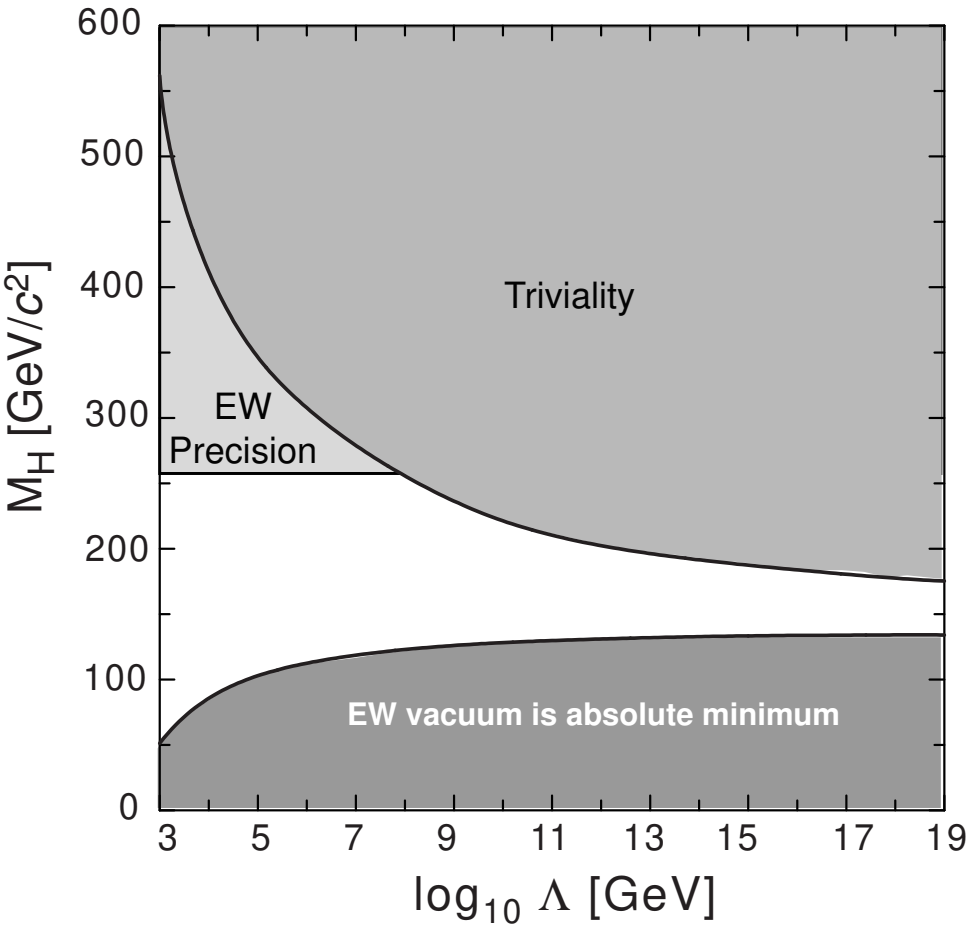
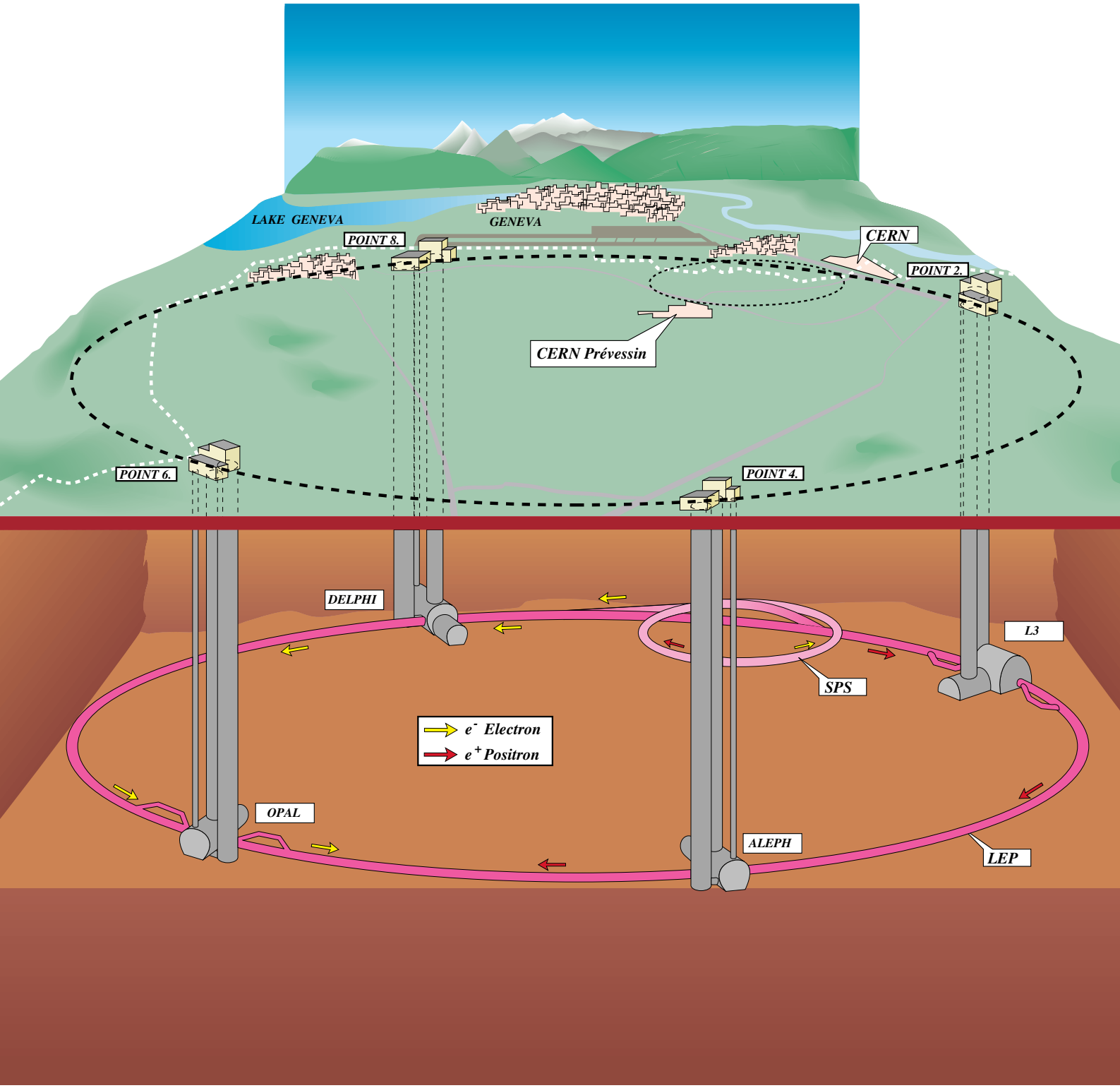
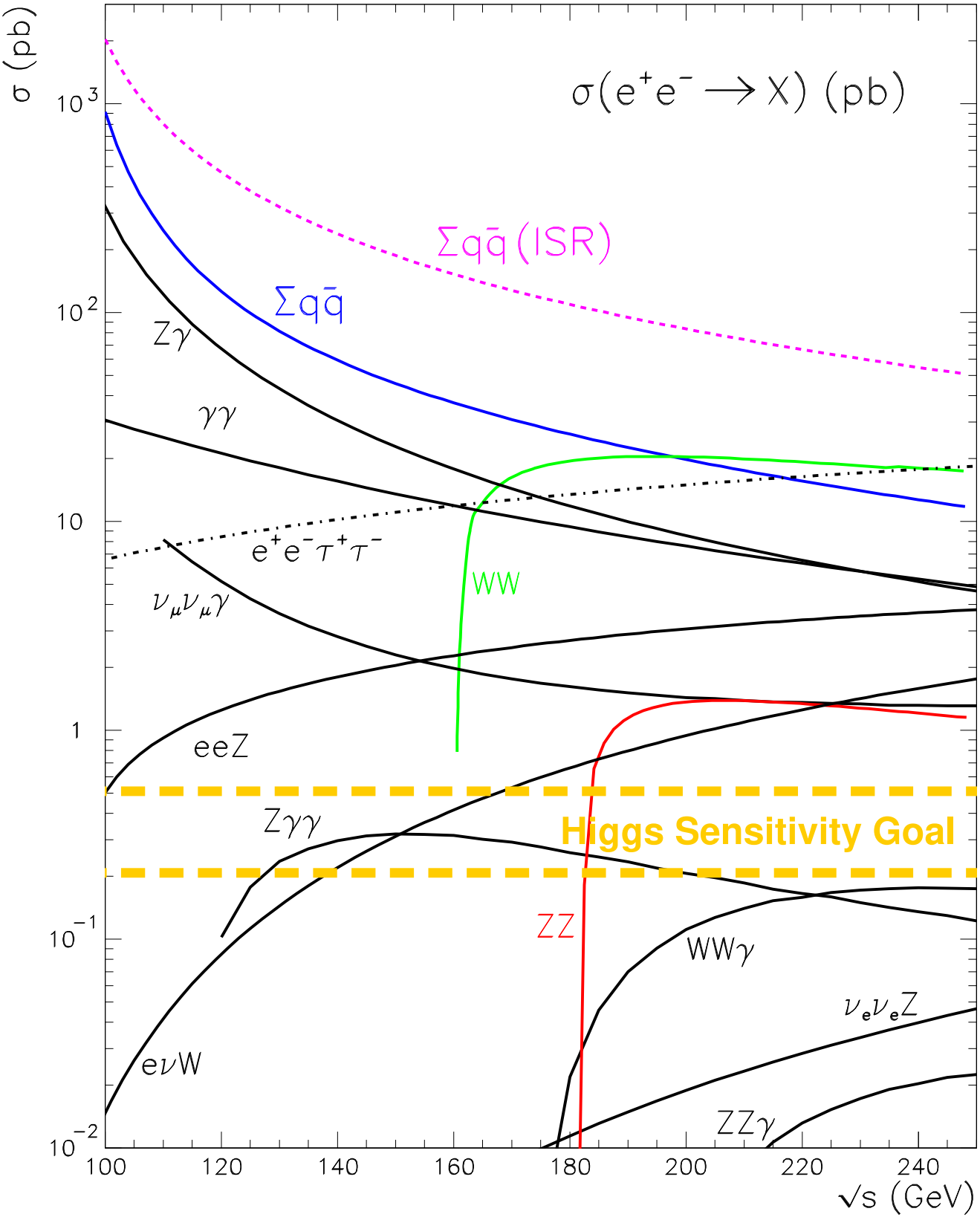
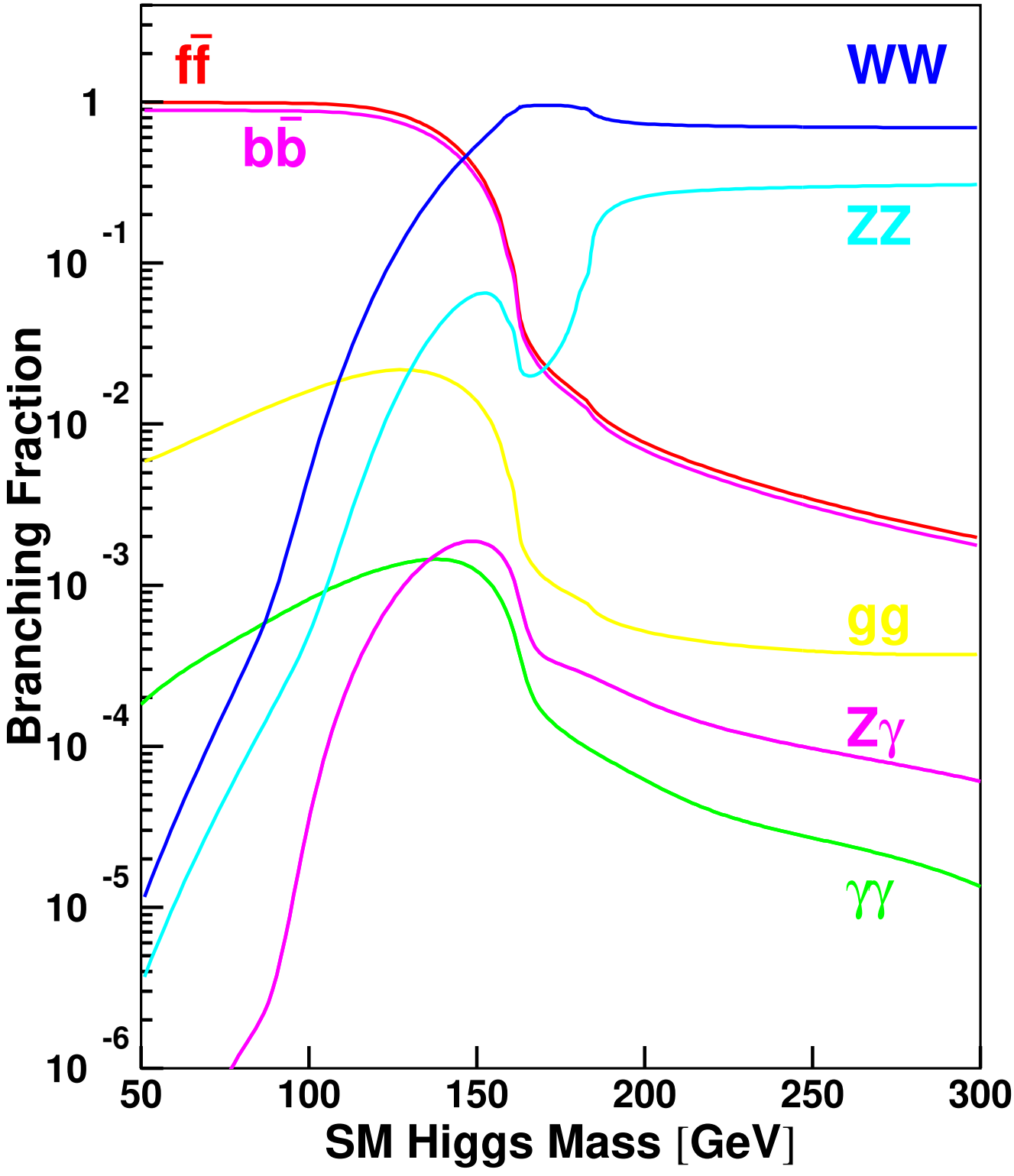

Theory uncertainty
$\Delta\alpha^{(5)}_{had}$ =
0.02761±0.00036
0.02749±0.00012
incl. low $Q^2$ data
Excluded
Preliminary
$\Delta\chi^2$
$m_H$ [GeV]
0
1
2
3
4
5
6
20
100
400


600
500
400
300
200
100
0
$M_H$ [GeV/$c^2$]
Triviality
EW
Precision
EW vacuum is absolute minimum
3
5
7
9
11
13
15
17
19
$\log_{10}\Lambda$ [GeV]


LAKE GENEVA
GENEVA
POINT 8.
CERN
POINT 2.
CERN Prévessin
POINT 6.
POINT 4.
DELPHI
L3
SPS
e⁻ Electron
e⁺ Positron
OPAL
ALEPH
LEP


σ (pb)
σ(e⁺e⁻ → X) (pb)
10³
10²
10
1
10⁻¹
10⁻²
Σqq̄ (ISR)
Σqq̄
Zγ
γγ
e⁺e⁻τ⁺τ⁻
WW
νμνμγ
eeZ
Zγγ
Higgs Sensitivity Goal
ZZ
WWγ
νeνeZ
eνW
ZZγ
100
120
140
160
180
200
220
240
√s (GeV)


ff̄
WW
bb̄
ZZ
gg
Zγ
γγ
Branching Fraction
1
10^-1
10^-2
10^-3
10^-4
10^-5
10^-6
50
100
150
200
250
300
SM Higgs Mass [GeV]