

COMPUTING METHODS IN HEP Exercise 7 Spring 2024

(To be returned by 10:15 on Friday 15.3.)

1. Take the latest version of HDECAY and calculate the SM Higgs boson width for $m_H = 125$ GeV. Use ROOT to plot the width as a function of the Higgs mass.
2. Calculate the SM Higgs boson width using FeynHiggs, and make a comparison plot with HDECAY values: plot with ROOT both HDECAY and FeynHiggs widths in one plot, and beneath it plot a ratio FeynHiggs width/HDECAY width.

Please push your answers into your public git repository.

Note: There is no lecture nor the exercise session on Friday 8.3. due to the break between the teaching periods.