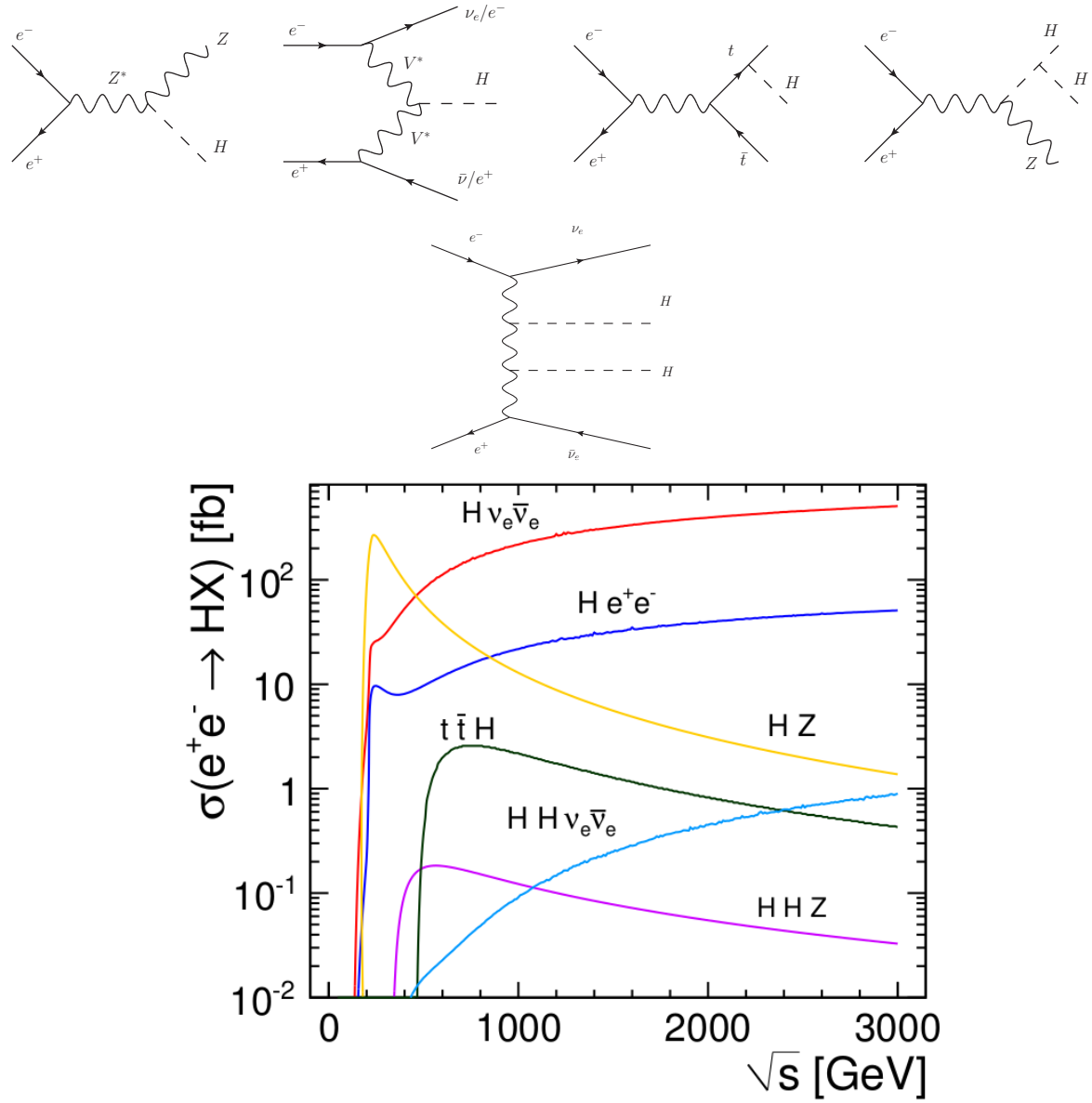

Figure 1.1: Feynman diagrams for production mechanism of the SM Higgs boson at CLIC and cross sections as a function of $\sqrt{s}$ for $m_h = 120$GeV.

1.3.3 New Physics

The LHC is expected to probe directly possible new physics beyond the Standard Model (BSM) up to a scale of a few TeV. While its data should provide answers to several of the major open questions in the present picture of elementary particle physics, it is important to start examining how this sensitivity can be further extended at a next generation of colliders. It is expected that new physics could be of supersymmetric nature. However, beyond supersymmetry, there is a wide range of other scenarios invoking new phenomena at the TeV scale. This new phenomena is aimed to explain the origin of electroweak symmetry breaking at stabilizing the Standard Model or at embedding the SM in a theory