

Decay width of Higgs decaying into two gluons and two photons

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Abstract. The discovery of Higgs boson at the LHC has opened a new chapter in particle physics in which the properties of the Higgs boson are used to study new physical phenomena. In this paper, the extremum (maximum and minimum) values of decay width of Higgs decaying into two gluons and two photons are evaluated theoretically using spin – $\frac{1}{2}$ triangle loop function and spin – 1 triangle loop function.

Keywords: Higgs decay; LHC physics; standard model; quantum field theory.

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