

Computer modeling of ttH Higgs boson production process in the framework of MSSM model

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The properties of the MSSM Higgs bosons, h and H, through the comparison with the actual experimental data were studied. For such appropriate investigation ATLAS data of the cross sections of Higgs boson decay into b-quarks were considered. In the framework of theoretical research of modeled process the tree-level Higgs sector described by two parameters M_A and $\tan\beta$ was used and their optimal values were found. Using the restricted parameter space we calculated cross sections of associated ttH(H) production at 13 and 14 TeV, the corresponding kinematical cuts, mass distributions and Branching Ratios of h and H decays into bb quark pair.

Section

1. Experimental and theoretical studies of nuclear reactions

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