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Top-quark width studies at ATLAS

A preliminary study of the top-quark width (Γ_{top}) is performed using the ATLAS collaboration official Monte Carlo (MC) samples corresponding to proton-proton collisions with centre of mass energy of \sqrt{s} = 8 TeV and scaled to integrated luminosity $\int Ldt = 20.3 f b^{-1}$. Templates with different values of Γ_{top} are generated assuming an underlying truth top mass distribution with relativistic Breit-Wigner shape, as modelled in the MC generator. The reconstructed top mass has been obtained by minimising a χ^2 function and simulated experiments have been studied.

Summary

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