

Abstract

In the hadronic part of semi-electronic $t\bar{t}$ decay channel, $t \rightarrow Wb \rightarrow jjb$, both W boson and top quark masses are constrained to agree with their measured values. An event-by-event Kinematic Fit using Lagrange multipliers is used to enforce the constraints. Residual corrections on the energy scale of both light jets from W boson decay and b jet from top quark decay are estimated by minimizing a χ^2 distribution coming out of the fitting procedure.