

# **Precise measurements of the top mass and direct measurement of the mass difference between top and antitop quarks at D0**

*jeudi 21 juillet 2011 15:00 (30 minutes)*

We report on measurements of the top quark mass using dilepton and lepton+jet data collected with the D0 detector. These results are compared to the top mass extracted from the  $t\bar{t}$  cross section using higher-order quantum chromodynamics calculations. We also present a direct measurement of the mass difference between top and antitop quarks ( $\Delta m$ ) in lepton+jets  $t\bar{t}$  final states using the “matrix element” method.

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