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Top Mass Measurement at D0 (15' + 5')

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We report on the most recent measurements of the mass of the heaviest known standard model particle, the top quark, obtained with the D0 detector at the Fermilab Tevatron collider. We use the full Run II dataset corresponding to 9.7 fb^{-1} of $p\bar{p}$ collisions at $\sqrt{s} = 1.96 \text{ TeV}$. We present direct measurements of the top mass in the dilepton decay channels using the matrix element and neutrino weighting approaches. We also present the combination with the measurement in the lepton+jets channel. As an alternative approach to the direct measurement of the mass, we discuss the extraction of the pole mass based on measurements of the inclusive and unfolded differential cross-sections of the $t\bar{t}$ pair production.

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