

## High Energy Physics - Experiment

# Combination of Tevatron searches for the standard model Higgs boson in the $W+W-$ decay mode

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We combine searches by the CDF and D0 collaborations for a Higgs boson decaying to  $W+W-$ . The data correspond to an integrated total luminosity of 4.8 (CDF) and 5.4 (D0)  $\text{fb}^{-1}$  of  $p\text{-}\bar{p}$  collisions at  $\sqrt{s}=1.96$  TeV at the Fermilab Tevatron collider. No excess is observed above background expectation, and resulting limits on Higgs boson production exclude a standard-model Higgs boson in the mass range 162-166 GeV at the 95% C.L.

Comments: 11 pages, 4 figures. Published in Phys. Rev. Lett, along with two accompanying letters, one from CDF and one from D0, describing the  $H\rightarrow WW$  searches which are combined here

Subjects: **High Energy Physics - Experiment (hep-ex)**

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