

Direct Standard Model Higgs Searches at the Tevatron

Wednesday 16 September 2009 09:00 (35 minutes)

Since the beginning of Run II the Fermilab Tevatron has delivered 6.9 fb⁻¹ of proton-antiproton collisions at a center of mass energy of 1.96 TeV. Using the collected dataset the CDF and D0 experiments are pursuing extensive Physics programs which have as a main goal the search for a Standard Model Higgs boson. The contribution will review the CDF and D0 results on the direct Standard Model Higgs searches over a wide mass range, from 100 to 200 GeV/c², including the golden channels, HW→lvbb in the lower mass region and H→WW→lvlv in the higher mass region, and a series of additional channels, ZH→llbb, ZH→vvbb, HW→WWW, and modes with tau leptons in the final state, which improve sensitively the experiments' reach. Particular prominence will be given to the recently updated measurements that analyze up to 5 fb⁻¹ of data. The combined upper limit of CDF and D0 measurements and the projections on the production cross section limits for the final dataset of Tevatron Run II will also be shown.

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Session Classification: DG1 - Electro Weak Symmetry Breaking

Track Classification: Electro Weak Symmetry Breaking