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Status and prospects for Higgs searches at the Tevatron DANIELA BORTOLETTO, Purdue University

The Tevatron has delivered more than 5.5 inverse femtobarns of proton-antiproton collisions to the DZero and CDF experiments. The two collaborations are developing novel advanced analyses techniques to search for the Higgs boson. The search exploits different production mechanisms for the Higgs boson according to its mass. The analyses search for the Higgs boson produced in association with either a W or Z boson for $MH < 135 \text{ GeV}/c^2$ where the Higgs boson is expected to decay primarily to a bottom-antibottom quark pair. In the higher mass range, $130 < MH < 200 \text{ GeV}/c^2$, the analyses search for the Higgs Boson produce singly and decaying to a pair of vector bosons, primarily WW. This talk reviews the current status of the Tevatron searches and presents the current production cross section limits, including the combined limits using the different search channels and the results from both CDF and DZero. The prospects for future improvements based on projected data sample sizes and novel experimental techniques are also discussed.