Abstract for an Invited Paper for the SES11 Meeting of The American Physical Society

## The impact of Higgs boson searches at the Tevatron in the LHC era

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The Tevatron's long program of colliding protons and anti-protons at a center-of-mass energy of 1.96 TeV will end in September of this year (2011). I will describe the ongoing efforts of the CDF and DØ collaborations to conclude their search for the Higgs boson and make predictions on their sensitivity with the complete dataset. The sensitivity of the LHC experiments at CERN is quickly surpassing the Tevatron in most new physics searches; however, in some efforts—such as some low-mass Higgs boson searches—the Tevatron results will remain competitive for quite some time. I will focus the talk on the complementarity of the information that will be provided by the Tevatron and LHC experiments and will explain why both are important in understanding the nature of a low mass Higgs boson if it is discovered in the next few years.