





Search for Higgs in H→WW→lvlv

John Alison

University of Pennsylvania

on behalf of the ATLAS Collaboration

Higgs Physics



A₁(

Standard Model

Theory vs Experiment

Remarkably Accurate Description Data. One Remaining Piece: Higgs Boson. Data predict m(H) below ~200 GeV





nealects correlations

Searching for the Higgs





$\underline{\mathbf{H}} \rightarrow \underline{\mathbf{W}} \underbrace{\mathbf{W}} \rightarrow \underline{\mathbf{lv}} \underline{\mathbf{v}}$

Strongest sensitivity over broad range of m(H) Critical in the region between LEP and SM EWK exclusion



Results





Results







The Future is Now.



Its a great time to be doing Higgs Physics!



Bonus



The future is now.





m_H [GeV]



The Future is Now.



00





Hww Sensitivity

