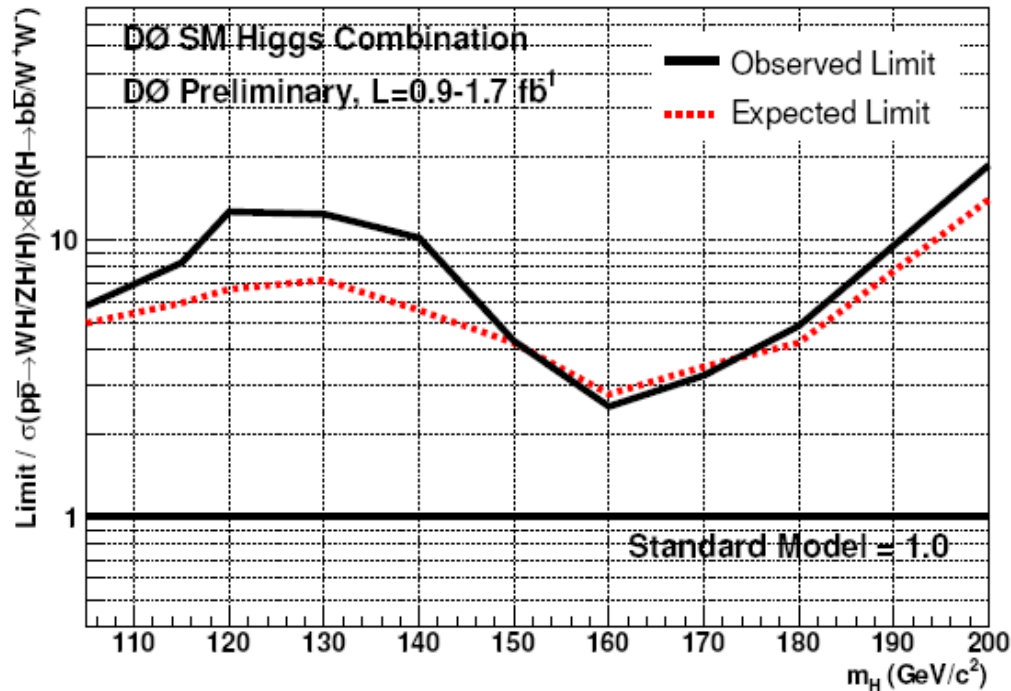


Higgs News

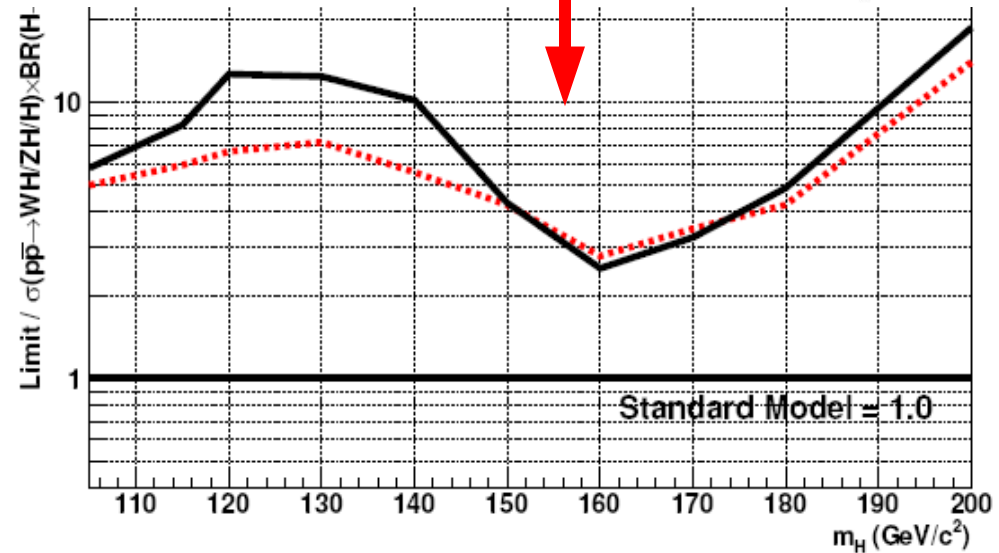
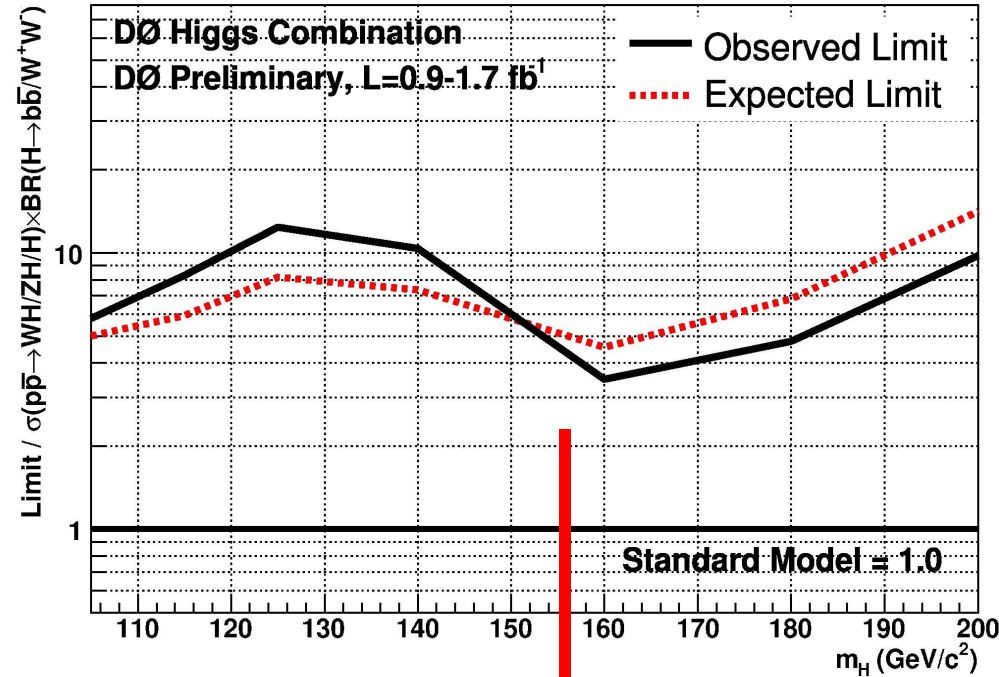
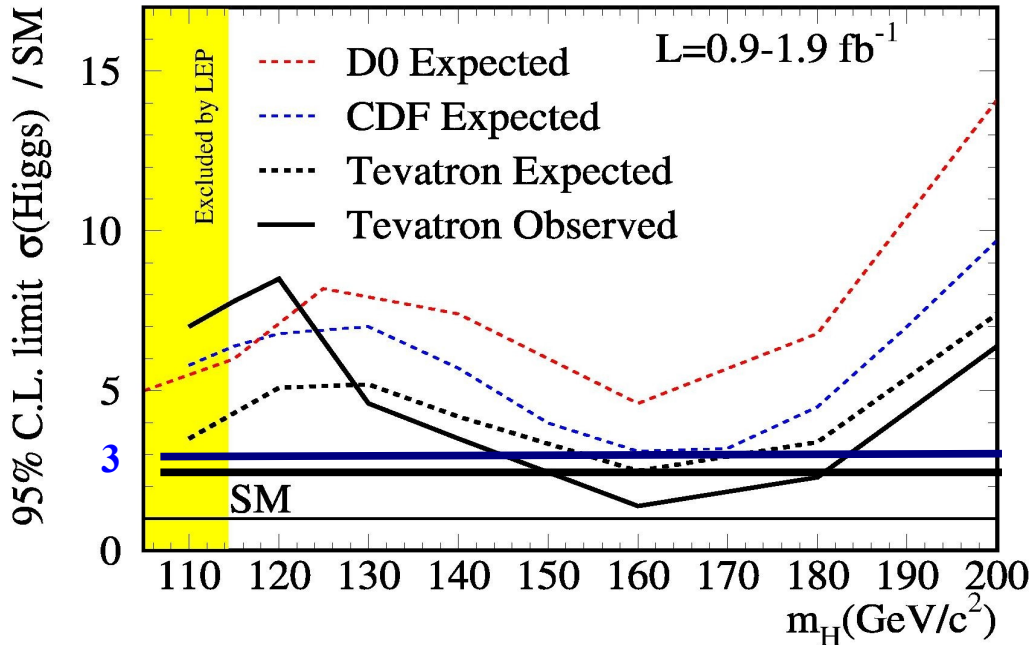


Andy Haas
Columbia University
DØ Higgs Meeting
September 20, 2007

New D0 Combination

- Updated $H \rightarrow WW \rightarrow ee, \mu\mu, e\mu$ results
 - 1.7/fb + Neural Net
 - From 4.6 to 2.8 @ 160 GeV
- We've caught up to CDF
- Combined CDF+D0? (2.8/sqrt(2)~2!)
- Would need 1.7*4=6.8/fb to reach 1...
- Lepton ID, Matrix element, optimize cuts / NN, tau channels, Z channels, reduce systematics, ... ?

Tevatron Run II Preliminary



Meetings / Organization

- Unify Higgs/NP Lepton+jets group with V+jets
 - Share experience with the top group
 - Tues., weekly, 9:00 in the d0ghouse
- Unify Higgs/NP tau group with Higgs/NP multi-lepton group
 - Single meeting for H->WW, including tau channels
 - Thanks to Harald for bearing the extra load!
 - Thurs., week B, 12:00, FarSide
- Restart WH->Inubb meeting
 - Include all “NN” and “ME” analyzers
 - Aim for combined Moriond'08 analysis
 - Wed., weekly, 9:00, d0ghouse
- New ZH->llbb meeting
 - Aim for combined NN+ME ee+mumu Moriond'08 analysis
 - Tues., weekly, 1:00, d0ghouse
- New D0 ME meeting
 - WW, WH, ZH, 1top, ...
 - Tues., week B, 11:00, BlackHole (high-rise)
- Webpages have been updated!

Jet Energy Resolution Group

- Brendan is leading a strong group
- Goal is to increase b-bbar (Higgs) mass resolution as much as possible
 - Key to finding the low-mass Higgs
- Many lines of attack: cal. weighting, track-jets, muon / neutrino corrections, width / #PV corrections, etc...
- Wed., weekly, 1:30, d0ghouse
- Talk to Brendan and volunteer!
- <http://www-d0.hef.kun.nl///displayLevel.php?fid=64>

Upcoming Events

- Lepton ID workshop
- Tues, next week
- Participate! (Or at the very least, attend.)

08:30	Muon ID overview (20)	Mike Eads
08:50	Use of very loose muons in analysis (15)	Chad Jarvis
09:05	Muon isolation studies (15)	Thomas Gadfort
09:20	Tau ID overview (10)	Serban Protoposescu
09:30	p20 tau neural network (20)	TBA
09:50	Low-pt tau ID (15)	Ingo Torchiani
10:05	Tau energy scale and single pion response (15)	TBA
10:20	Break (15)	
10:35	Electron ID overview (20)	Oleksiy Atramentov/Dmitri Bandurin
10:55	Tracking efficiency and hits-on-road (15)	TBA
11:10	p20 electron neural network (15)	Xuebing Bu
11:25	Track-EM cluster matching efficiency (10)	Masato Aoki
11:35	ICR electrons (15)	Oleksiy Atramentov/Thomas Gadfort
11:50	QCD studies from the V+jets group (15)	Andres Tanasijczuk
12:05	Using l+track ID for dilepton analyses (15)	Robert Wagner

Upcoming Events

- **Higgs mini-workshop**
- Tentatively planned for **third week of October (Thurs. Oct. 18th?)**
- Review status of analyses and outstanding issues
- Plan attack for Moriond

- **Higgs workshop**
- Tentatively planned for **first 2 days of Dec. collaboration meeting (Dec. 3,4)**
- Review analyses heading for Moriond
- *Aim to use full 2.6/fb of data... it has all been reconstructed!*

- **Moriond analyses complete and note to Higgs group by ~ Jan. 1 '08**