

D0-France @ Lyon / last brief remarks

G. Bernardi

**21 participants on site
+ two special guests**

**32 talks, one
discussion session
and a good banquet.**

**Not a summary, just
some remarks**



Manpower summary

		2010	2011	2012
LPC	Clermont	2.6	1.8	0.4
LPSC	Grenoble	2.1	0.6	0.0
IPN	Lyon	2.3	1.5	1.0
CPP	Marseille	5.4	3.8	2.8
LAL	Orsay	4.2	2.5	1.7
LPNHE	Paris	4.1	3.2	1.2
IPHC	Strasbourg	3.2	1.7	0.8
Total-in2p3		23.9	15.1	7.9
IRFU		10.6	~10	

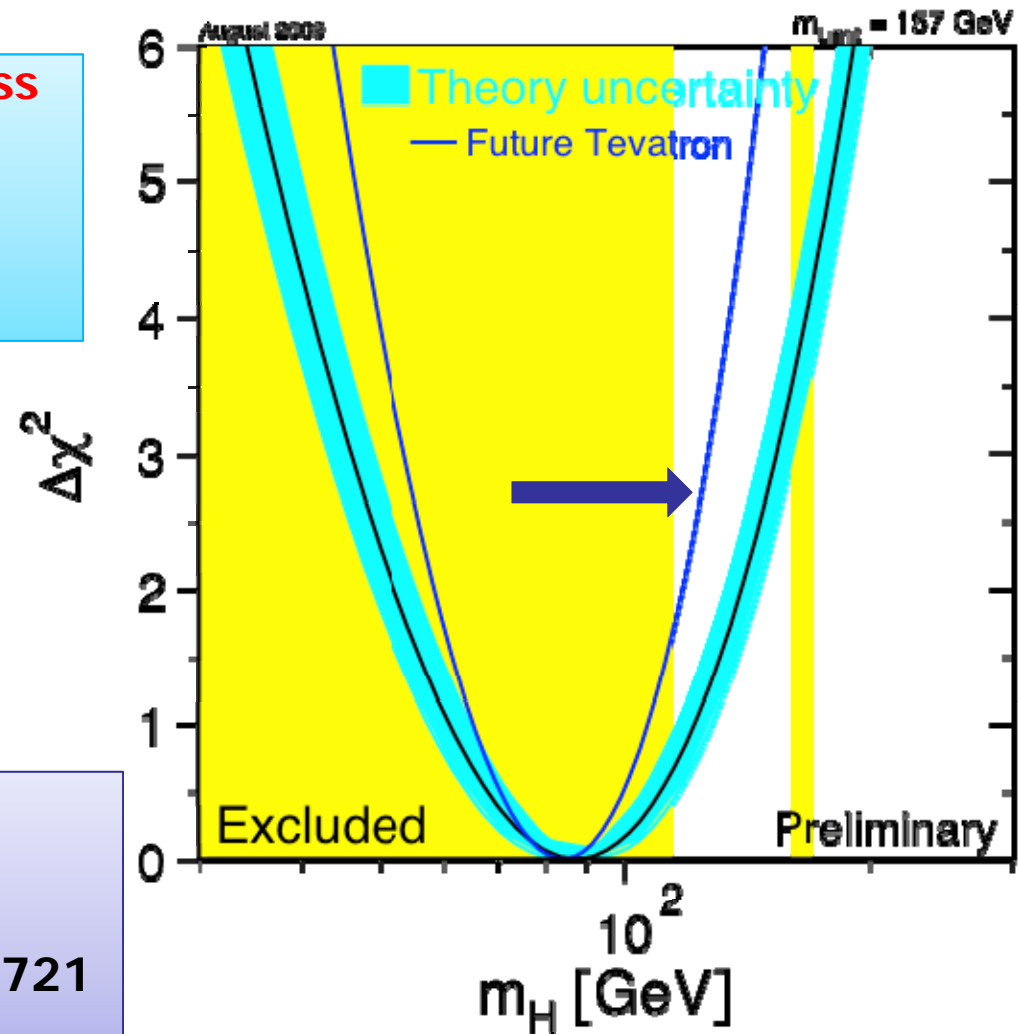
**Clear need at in2p3 for
~2-3 postdocs in 2010,
and
~1-2 postdocs in 2011
to mitigate the manpower decrease**

Need to maintain manpower & budgets in 2011-2012

Self-consistency of SM

Precision of 1 GeV for the **top mass**
and 15 MeV for **W boson mass**:

$m_H < 117$ GeV at 95% CL
for current minimum

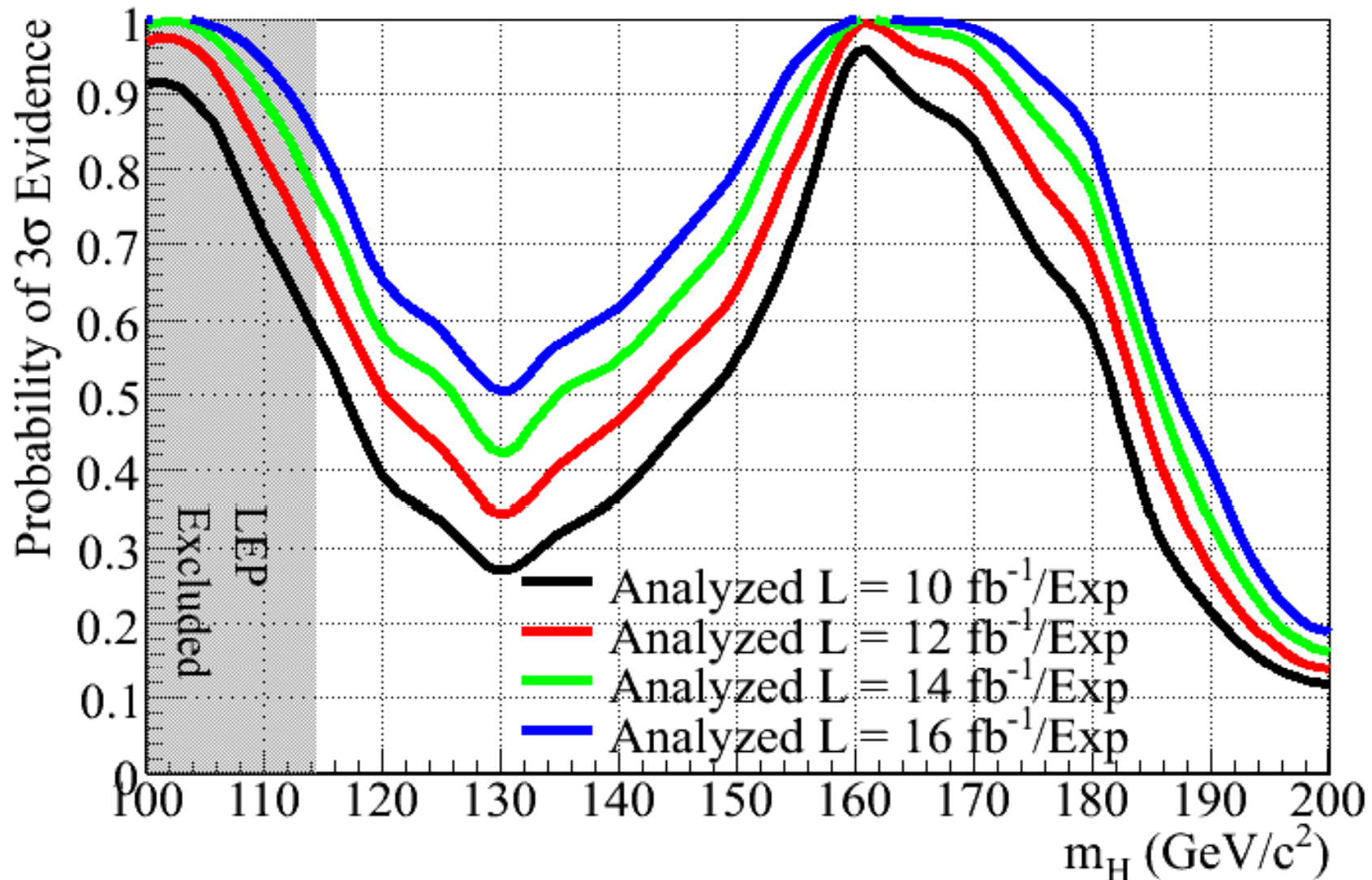


In addition, we will be able
to cover a very significant
part of the parameter space
for **SUSY Higgs boson**, see
Draper, Liu, Wagner, arxiv:0905:4721

→ Watch for potential **NP**

Projections in Higgs Sensitivity

Without direct observation of Higgs decays into b jets it's not possible to reach a definite conclusion about the EWSB mechanism



> 80% 'a priori' probability to observe evidence for 115 GeV Higgs with 16 fb⁻¹

Beyond 2011 / Conclusions

- TWO Scenarios:

→ **Short** : publish all main results by end of 2012
leaves time to join LHC before 14 TeV run
(which starts mid-2013 or 2014)

→ **Long** :

- Running the Tevatron for 3 more years to accumulate 16 fb⁻¹ since finding evidence for a low mass Higgs boson in b decays is essential to understanding EWSB in the Standard Model.

- Currently assessing tracking performance beyond 2011 and Status of manpower beyond 2011.

- More news in Marseille and at next D0-France during thanksgiving 2011 (Saclay?)

- **Thanks to all speakers for their excellent talks and Special Thanks to all who made the effort to come, thus making a lively meeting and welcome Etienne and Ursula who could directly see our motivations.**

Thanks again Patrice and Lyon!