Welcome!

Please note the safety slides

56 Years of Review of Particle Physics

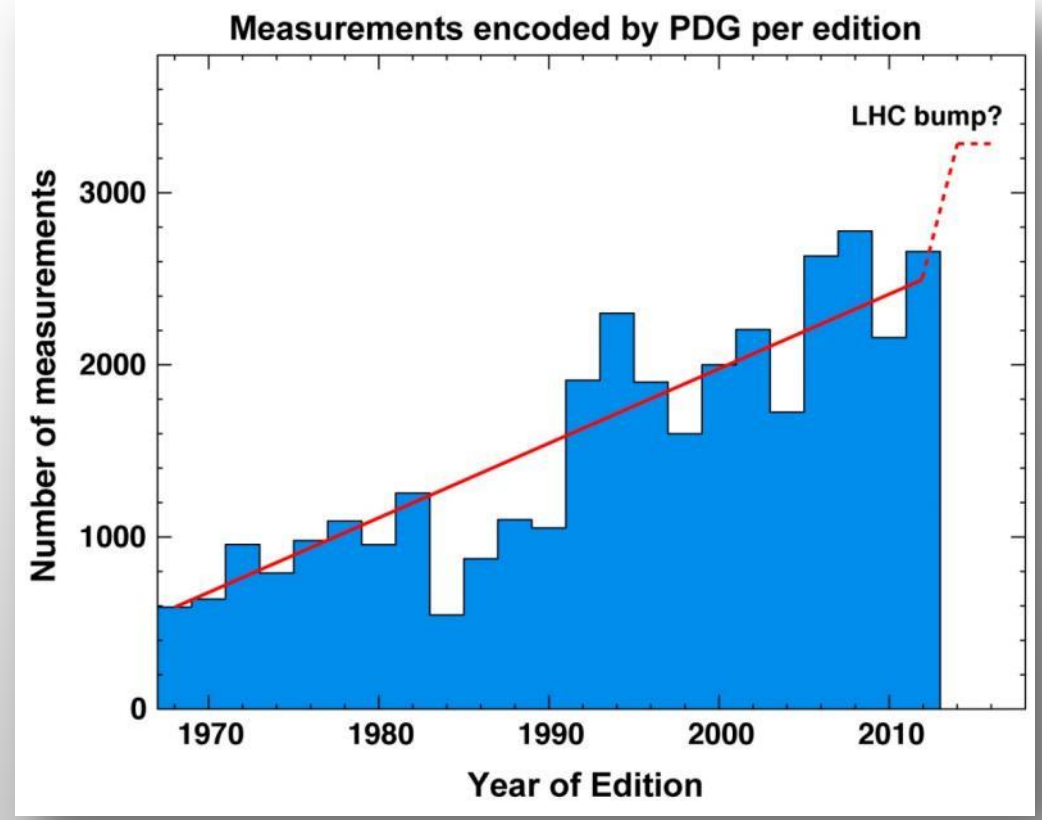
June 2013

The World of PDG Authors

- **193 authors** (leading experts) from 22 countries and 117 institutions
- Plus 700 consultants in the HEP community

Increasing Number of Papers

Workload has increased dramatically. There is and will continue to be an explosion of papers from the LHC experiments, so we anticipate a "bump".



Each measurement needs to be fully understood in order to properly "encode" the data for the Review.

Searches

Papers	2008	2010	2012	2013x2
Supersymmetry	33	34	68	160
Axions	18	21	21	22
Higgs	12	34	51	216
W', Z'	18	16	36	68
Compositeness	6	5	12	18
Extra dimensions	11	10	17	38
Other searches	4	12	37	144
Free q, monopoles	1	3	2	6
	103	135	244	672

For **half** of the 2014 web edition, 336 papers!

2012 Edition of *Review*

- **2658 new measurements from 644 new papers**
  (of total 32,100 measurements and 8900 papers).
- **112 reviews with many exciting and new features**

☆ Color Figures everywhere

Heavy Usage of Reviews

Many review articles from the 2010 edition were downloaded more than 100,000 times each, including, for example:

- **Higgs Boson,**
- **Passage of Particles through Matter,**
- **Particle Detectors for Accelerator-Based Physics,**
- **Statistics,**
- **Neutrino Mixing,**
- **Electroweak Model.**

The cosmology reviews were downloaded more than 243,000 times in total.

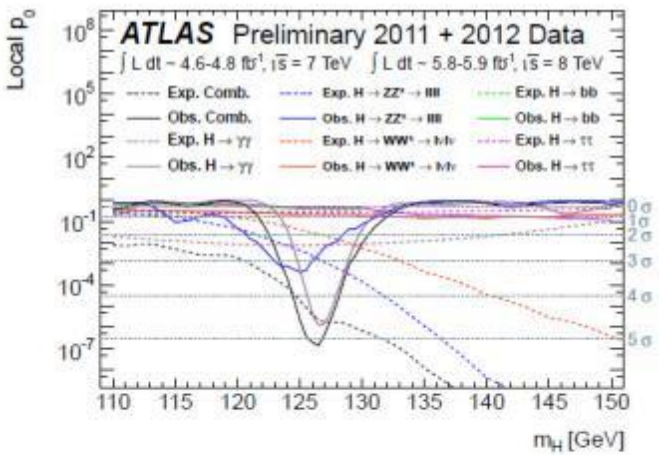
Last-Second Update to 2012 Edition

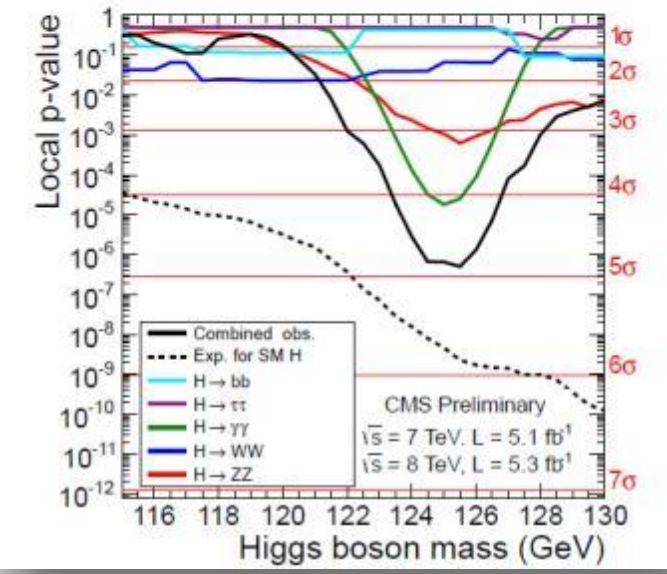
Higgs Boson addendum

VII. Addendum

Updated July 12, 2012.

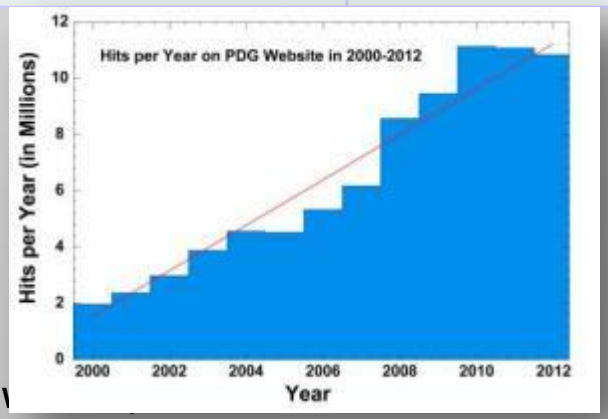
On July 4, 2012, the ATLAS and CMS collaborations simultaneously announced observation of a new particle produced in pp collision data at high energies [363–366]. The data samples used correspond to between 4.6 and 5.1 fb^{-1} of collision data collected at $\sqrt{s} = 7$ TeV in 2011, and between 5.3 and 5.9 fb^{-1} of collisions collected at $\sqrt{s} = 8$ TeV in 2012. The observed decay modes indicate that the new particle is a boson. The evidence is strong that the new particle decays to $\gamma\gamma$ and ZZ with rates consistent with those predicted for the Standard Model

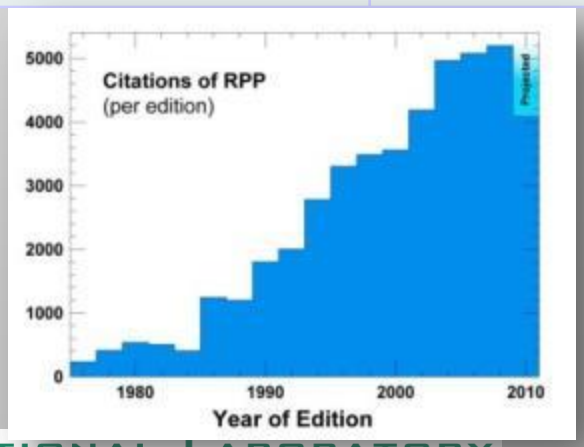




Impact

	1984 Edition	2010 Edition
Citations	480	4092 → 5200 (asymp.)
Web Hits	Zero → 4 million in 2000 Ed.	22 million
Pages in Book	304	1525
Pages in Booklet	164	303 → 350 (size chg.)
Number distributed	4500 & 9000 (books & booklets)	15,000 & 31,000
Review articles	17	112
Measurements	547	2158 (2658 in 2012)
Authors	14 + 8 (meson)	180 + 13 (meson)





Listings and Reviews

The Web allows us to see what most interest our readers.

The hits (page views) on

Data Listings = Reviews

almost exactly equal.

Clearly people care about both.

PDG App

PDG gets many comments and suggestions but by far the most common request is for a PDG app.

This would mean that every physicist could have the PDG tables and reviews in their pocket at all times.

- **In the control room,**
- **On an airplane,**
- **In their office.**

LHC has changed the landscape

We have a Higgs boson with properties, but we are still searching for other Higgs.

Supersymmetric Higgs are in both SUSY and Higgs reviews. How should be handled?

What happens to Technicolor after Higgs? Review should address the implications for Technicolor.

Top Quark and Electroweak reviews should consider known Higgs.

Figures are very helpful (especially color). Tables are good too.

Thank you for taking the time to attend this workshop!