

LHC Working Group
on
Electroweak precision
measurements at the LHC

Meeting 1, CERN
April 4-5 2011

What are the LHC WGs

- LHC version of the LEP WGs
- Jointly setup by the LHC experiments and the LPCC
- Forum for a joint discussion (Exp+TH) of topical physics-related issues
- Explore the use of common tools, to facilitate the comparison and assessment of experimental findings
- Take responsibility for steering the combination and averaging of LHC measurements

As of today, we have in place the following WGs:

- MB & UE
- Rate normalization
- EW

EW WG

WG members

- ATLAS: M. Boonekamp and J. Guimaraes da Costa
- CMS: M. Schmitt and G. De Monchenault
- LHCb: R. McNulty and T. Shears
- LPCC: M. Mangano

plus experts from the experiments and TH, as consultants

Primary areas of interest and goals

- Precision measurements include, among others:
 - M_W , gauge boson production cross sections and distributions, A_{FB} and extraction of $\sin^2\theta_W$, TGC
 - M_{top} (now yet addressed)
- The WG mandate includes the
 - study of the systematics, experimental and theoretical, relative to the above measurements
 - the definition of measurements and tools (MC generators, theory calculations, detector simulation, special running conditions, ...) required to address the above systematics and carry out the programme
- The WG will also discuss the issues related to the comparison and combination of the results from the various experiments and, when necessary, the combination with LEP and Tevatron results.

Warning

- This is not a Workshop, it is a WG meeting
- For the benefit of the discussion, the experiments may wish to mention some elements of work in progress, warning that this is the case.
- It is requested that we should all respect the confidentiality of these statements
- If you are in doubt, please double check with the relevant people before divulging information acquired during this event