

Introduction

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- This is the first meeting of the LHC precision EW sub-group in 2018 and it is focused on measurements of the weak mixing angle
<https://indico.cern.ch/event/707969/> (25/04, room Anderson)
<https://indico.cern.ch/event/707971/> (26/04, theory room 4-3-006)
- Next meetings will be 23-25th of May in Orsay and 20th of June at CERN (general LHC SM meeting will be 21-22nd of June)
- Please register for Orsay workshop as soon as possible, even if you will join only by video
Workshop web page at <http://electroweak2018.lal.in2p3.fr/>
Skeleton agenda at <https://indico.cern.ch/event/708015/>

General goals of this meeting

- **Agenda includes plenty of time for discussion. Two discussions sessions foreseen:**
 - a) this afternoon to discuss experimental issues concerning combination of LHC (and possibly Tevatron) measurements of s_2w**
 - b) tomorrow afternoon to discuss theoretical issues concerning interpretation of measurements in terms of s_2w**
- **Both points above motivate today's historical overview of existing measurements, from LEP to Tevatron to the first measurements by ATLAS, LHCb, and CMS (in chronological order)**
- **The second point above motivates the more theoretically oriented talks of tomorrow**

General goals of this meeting

- This introduction should not preempt the discussions planned for today and tomorrow
- We hope that we could arrive at a combination towards the end of this year
- To achieve that we need to agree hopefully by the June meeting on two things:
 - a) a common theoretical model to interpret the measurements (to extract \sin^2_{W} , $\sin^2_{\text{W}}^{\text{eff}}(\text{lep})$, m_{W})
 - b) an agreement on how to do the experimental combination
- Goal of this meeting is to determine whether this might be feasible and how