

# Working group 1

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<https://twiki.cern.ch/twiki/bin/view/LHCPhysics/LHCHXSWG1>



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# Working group 1 goals, ...



- The mission of working group 1 is to provide predictions for SM Higgs.
  - Cross-sections, total and differential, branching ratios.
  - Improving the understanding of reducible and irreducible backgrounds is also among the goals.
  - In many cases, collaboration with WG2 and WG3 (as well as the cross-groups) is natural and very important.



## ... structure,

- In its present form, the group activities started on August 28<sup>th</sup> (<https://indico.cern.ch/event/336504/>)
- A structure based on task-forces with a specific mandate was put in place.
  - The aim of the task-forces was to survey the state of the art in several areas, producing a report indicating the priorities in each area.
  - The following task forces were created.
    - Branching ratios
    - ggH
    - VBF+VH
    - ttH
    - Off-shell
    - initially also HH and bbH, which later became cross-groups.



... activities,

- In the last 5 months very intense activities have been organized by the WG1.
  - 13 subgroups meetings were organized (plus 5 from the cross-groups).  
<https://indico.cern.ch/category/5847/>
  - Very lively and productive discussions took place.
  - Task force reports have been or are being finalized.



## ... and near future

- The goal of the present structure was to gather all the informations need to plan the work for Run II.
  - Today we will hear presentations from all the task forces summarizing the work that has been done.
  - Having followed such activities we think that such goal has been achieved.
- After the end of the annual meeting, we will make a proposal on how to further structure the WG in view of the Yellow Report 4.