

Table of Contents

| | |
|--|---|
| LHC Higgs Cross Section Working Group 1..... | 1 |
| | 1 |
| | 1 |
| | 1 |
| | 1 |
| | 2 |

LHC Higgs Cross Section Working Group 1

| | |
|----------------------|---|
| Mailing list: | lhc-higgs-xsbr@cernNOSPAMPLEASE.ch use this link ↗ to subscribe. |
| Meetings | agenda ↗ |

| Mail to conveners | ATLAS | CMS | THEORY | |
|-------------------|---------------------------------------|---|--------------------------|-------------------------|
| Mail | Roberto Di Nardo (Roma III) (12/2020) | Julie Malclès (CEA, Paris-Saclay) (12/2020) | John Campbell (Fermilab) | Fabrizio Caola (Oxford) |

| Group TWiki | Group Mailing List | Mail to conveners | ATLAS | CMS | THEORY | | |
|-----------------|--------------------|-------------------|---|---|--------------------------------|---|-------------------------|
| BR | | Mail | Daniela Rebuffi (Pavia) | Ivica Puljak (Split) | Ansgar Denner (Würzburg) | Sven Heinemeyer (IFCA) | Alexander Mück (Aachen) |
| ggF | | Mail | Syed Haider Abidi (BNL) | Andrea Massironi (Northeastern U) | Bernhard Mistlberger (CERN) | Emanuele Re (Annecy) | |
| VBF | Mailing List | Mail | Antonio De Maria (Nanjing University) | Yacine Haddad (Imperial College) | Alexander Karlberg (Zurich) | Simon Plaetzer (University of Vienna) | |
| VH | Mailing List | Mail | Thomas Calvet (Stonybrook) | Chris Palmer (Princeton) | Ciaran Williams (Buffalo) | Giancarlo Ferrera (University of Milan) | |
| ttH/tH | Mailing List | Mail | Maria Moreno Llacer (IFIC, CSIC-U.Valencia), Josh McFayden (University of Sussex) | Joshua Thomas-Wilsker (Chinese Academy of Sciences) | Stefano Pozzorini (Zürich) | Laura Reina (Florida) | |
| Offshell | | Mail | Lailin Xu (Brookhaven BNL) | Ulascan Sarica (Univ. of California Santa Barbara) | Nikolas Kauer (Royal Holloway) | Raoul Roentsch (KIT, Karlsruhe) | |

| Group | ShortDescription | Deliverables | Timescale | |
|------------|------------------------------------|--|-----------|--|
| ggF | Uncertainties in kinematic regions | Recommendation (LHCXSWG-INT-2017-001); | --- | It is a set of per-event weights, one for simplified/template cross section setu |

| | | | | |
|-----------------|---|--|--------------------|---|
| | | Tool ↗ | | being this the reference and the most Re-weighting Powheg to NNLOPS is calculated with a given perturbative order result may be inconsistent. |
| ggF | Boosted-Higgs cross-section recommendation | Recommendation (LHCXSWG-2019-002) | Fall 2019 | Note available here ↗ and update here |
| VBF | PS uncertainties | Study PS issues abroad wide range of relevant observables | 2020 | Public note with detailed benchmark s systematic investigation of parton shower generators at NLO QCD matched with |
| VBF | STXS uncertainties | Public tool, public note | Spring/Summer 2020 | --- |
| VBF | Jet multiplicities merging and Parton shower accuracy | [potentially public note] | >Summer 2020 | --- |
| VBF | Higher-order corrections | [potentially public note] | >2020 | --- |
| VBF | Higgs Boson Plus Dijets | [potentially public note] | Summer 2020 | --- |
| VH | VH XS prediction and uncertainties in STXS framework | Software tool providing central value and uncertainties + recommendations | --- | |
| VH | V+hf modeling for VH(bb) | [public note] MC comparison across several V+hf MC tools targeting VH(bb) phase space, guidelines for theory uncertainties on V+hf predictions | --- | |
| VH | ggZH merged predictions | [potentially public note] Comparison between showered ggZH 0+1jet merged LO MC prediction, and ggZH LO prediction | --- | |
| ttH/tH | tt+b-jets modelling | Public note | 2020 | Provide the experiments with well-defined corresponding Monte Carlo tools in e |
| ttH/tH | tt+V (V=W,Z)->multi leptons modelling | Potential public note | November 2020 | Comparison and harmonisation between calculations, and eventually provide the for the use of the corresponding Monte |
| Offshell | Harmonise ATLAS/CMS/Theory | Guiding documentations (public note on arXiv) | November 2020 | TWiki page: HiggsOffshellTaskForce See here for the detailed plans: https://twiki.cern.ch/twiki/pub/LHCPH |



Studies on parton shower uncertainties

GiovanniMarchiori - 2020-03-27

This topic: LHCPhysics > LHCHWG1

Topic revision: r50 - 2021-03-04 - RobertoDiNardo



Copyright &© 2008-2021 by the contributing authors. All material on this collaboration platform is the property of the contributing authors.

or Ideas, requests, problems regarding TWiki? use [Discourse](#) or [Send feedback](#)