

# Table of Contents

|                |    |
|----------------|----|
| ).....         | 1  |
| .....          | 2  |
| .....Mail..... | 2  |
| .....          | 8  |
| .....          | 10 |

---

\* LHCHXSWG Next General meeting November 9 (Mon.) - 11 (Wed.) 2020 [🔗](#) **NEW**

---

)

### **Upcoming meetings**

\* LHCHXSWG General meeting November 9 (Mon.) - 11 (Wed.) 2020 at CERN. [🔗](#) **NEW**

### **Regular meetings**

- SC weekly meeting takes place every Friday 17:00-18:00. Please avoid organizing meetings during this time slot if possible.
  - Also please avoid having meetings in the morning unless no other choice, to facilitate the participation of our friends from other side of the pond.
-

The LHC Higgs cross-section working group ( LHCHXSWG) was created in January 2010. The aim of this group was to produce agreements within the LHC community on cross sections, branching ratios and pseudo-observables relevant to SM and MSSM Higgs boson(s). In spring 2012, the group was restructured and new subgroups were added with the goal of discussing Higgs property/measurement and BSM extensions. A further restructuring took place in 2014, when the TAC (Theory Advisory Committee) was added to the organization, and an agreement was made with CERN for local support. The TAC always includes one permanent member of the CERN theory group. The activities of the group are supervised by the Steering Committee (SC) that includes two representatives from each experiment and four representatives from the theory community. The SC members from ATLAS or CMS are appointed by each experiment after their internal selection procedures. The SC members from the Theory community are appointed by the TAC, in coordination with the SC. Four CERN Reports have been completed, "Inclusive Observables" ( CERN-2011-002 [↗](#)), "Differential Distributions" ( CERN-2012-002 [↗](#)), "Higgs Properties" ( CERN-2013-004 [↗](#)), and "Deciphering the Nature of the Higgs Sector" ( CERN-2017-002 [↗](#)). These achievements facilitated the comparison and combination of Higgs results at LHC since the beginning of the LHC physics programme. The group continues its work to provide recommendations on theoretical predictions and methodologies on Higgs boson(s) studies to the experiments for both current and planned LHC runs. More general aspects related to non-Higgs-boson(s)-specific subjects, like global Effective Field Theories or Dark Matter model studies, will be pursued by the LHCHXSWG in coordination with other more general efforts of the LHC community.

If you want to join the working group, please send an e-mail to working group conveners listed below. Please subscribe yourself to the mailing lists of the group.

- CERN support for HXSWG operation: Guidelines (2014.12.19)

- Previous organization: 2010-2011, 2012-2013, 2014-2016

## Mail

| ATLAS                          |  | CMS                     |                             | THEORY                          |                                  |                              |                             |
|--------------------------------|--|-------------------------|-----------------------------|---------------------------------|----------------------------------|------------------------------|-----------------------------|
| Kerstin Tackmann (DESY) (2019) | Giacinto Piacquadio (Stony Brook) (2020) | Roger Wolf (KIT) (2018) | Andrei Gritsan (JHU) (2020) | Veronica Sanz (Valencia) (2019) | Robert Harlander (Aachen) (2019) | LianTao Wang(Chicago) (2020) | Paolo Nason (Milano) (2019) |

- We are organized in 3 working groups.

| Group TWiki                  | Mail to conveners | ATLAS                                   | CMS   | THEORY                              |                                  |
|------------------------------|-------------------|---|---|-------------------------------------|----------------------------------|
| <b>WG1: Higgs XS&amp;BR</b>  | Mail              | Giovanni Marchiori (Paris LPNHE) (2018) | Alicia Calderon (Universidad de Cantabria) (2018) | John Campbell (FNAL) (2017)         | Fabrizio Caola (Oxford) (2017)   |
| <b>WG2: Higgs Properties</b> | Mail              | Nicolas Berger (Annecy LAPP) (2020)     | Predrag Milenovic (Belgrade) (2018)               | Jorge de Blas (Durham) (2019)       | Giuliano Panico (Firenze) (2019) |
| <b>WG3: BSM Higgs</b>        | Mail              | Anna Goussiou (Seattle) (2018)          | David Sperka (Boston University) (2018)           | Zhen Liu (Univ. of Maryland) (2019) | Pietro Slavich (LPTHE) (2017)    |

- Remove **SPAMNOT** from mailing address when sending.

| Group TWiki   | Group Mailing List | Mail to conveners | ATLAS  | CMS   | THEORY                               |   |                             |
|---|--------------------|-------------------|--|---|--------------------------------------|---|-----------------------------|
| <b>BR (WG1)</b>                                     |                    | Mail              | Daniela Rebuffi (Pavia)  | Ivica Puljak (Split)                                    | Ansgar Denner (Würzburg)             | Sven Heinemeyer (IFCA)                  | Alexander Mück (Aachen)     |
| <b>ggF (WG1)</b>                                    |                    | Mail              | Kathrin Becker (Freiburg)  | Andrea Massironi (Northeastern U)                       | Bernhard Mistlberger (CERN)          | Emanuele Re (Annecy)                    |                             |
| <b>VBF (WG1)</b>                                    | Mailing List       | Mail              | Antonio De Maria (Nanjing University)                                | Yacine Haddad (Imperial College)                        | Alexander Karlberg (Univ. of Zurich) | Simon Plaetzer (University of Vienna)   |                             |
| <b>VH (WG1)</b>                                     | Mailing List       | Mail              | Thomas Calvet (Stonybrook)   | Chris Palmer (Princeton)                                | Ciaran Williams (Buffalo)            | Giancarlo Ferrera (University of Milan) |                             |
| <b>ttH/tH (WG1)</b>                                 | Mailing List       | Mail              | Maria Moreno Llacer (IFIC / CSIC-U.Valencia)                         | Joshua Thomas-Wilsker (IHEP, Beijing)                   | Stefano Pozzorini (Univ. of Zurich)  | Laura Reina (Florida State Univ.)       |                             |
| <b>Offshell (WG1)</b>                               |                    | Mail              | Lailin Xu (Brookhaven BNL)   | Ulacan Sarica (Univ. California Santa Barbara)          | Nikolas Kauer (Royal Holloway)       | Raoul Roentsch (KIT)                    |                             |
| <b>Fiducial, Differential and Template XS (WG2)</b> | Mailing List       | Mail              | Hongtao Yang (LBNL)  | Lorenzo Viliani (Firenze)                               | Frank Tackmann (DESY)                |   |                             |
| <b>bbH/bH (WG3)</b>                                 |                    | Mail              | Lei.Zhang (Freiburg)   | Abdollah Mohammadi (Kansas State)                       | Michael Spira (PSI)                  | Marius Wiesemann (Univ. of Zurich)      |                             |
| <b>Extended Higgs Sector (WG3)</b>                  |                    | Mail              | Lidija Zivkovic (Belgrade IP), Jana Scharshmidt (Seattle Washington) | Raffaele Gerosa (Milano-Bicocca), Jan Steggemann (CERN) | Heather Logan (Carleton)             | Rui Santos (ISEL/CFTC, Lisbon)          | Shufang Su (Arizona)        |
| <b>MSSM (WG3)</b>                                   |                    | Mail              | Timothy Barklow (SLAC)   | Artur Gottmann (KIT)                                    | Emanuele Bagnaschi (PSI)             | Pietro Slavich (LPTHE, Paris)           | Michael Spira (PSI)         |
| <b>NMSSM (WG3)</b>                                  |                    | Mail              | Nikos Rompotis (Univ. of Liverpool)                                  | Janek Bechtel (KIT)                                     | Ulrich Ellwanger (LPT, Orsay)        | Margarete Mühlleitner (KIT)             | Nausheen Shah (Wayne State) |
| <b>Exotic Higgs Decays (WG3)</b>                    |                    | Mail (1)          | Lily Morvaj (Stony Brook)  | Georgia Karapostoli (Univ. of California, Riverside)    | Brian Shuve (Harvey Mudd)            | Matthias König (Zurich)                 |                             |
| <b>HH (Cross group)</b>                             | Mailing List       | Mail              | Arnaud Ferrari (Uppsala)   | Luca Cadamuro (Univ. of Florida)                        | Ramona Gröber                        | Javier Mazzitelli                       | Margarete Muehlleitner      |

|            |  |                          |  |  |                                      |                      |       |
|------------|--|--------------------------|--|--|--------------------------------------|----------------------|-------|
|            |  |                          |  |  | (Padova<br>(University<br>and INFN)) | (Univ. of<br>Zurich) | (KIT) |
| <b>ALL</b> |  | Mail to all<br>conveners |  |  |                                      |                      |       |

(1) This group also has an experimental contact from LHCb: Lorenzo Sestini.

- Remove **dummy.name@SPAMNOTcernSPAMNOT.ch** or **SPAMNOT** from mailing address when sending.
- The address should have the prefix "lhc-higgs-" for any kind of mailing lists in our group.
- Any TWiki page Topic name should have the prefix "LHCHXSWG" and should be created under "LHCHXSWG" Topic parent.

| Group TWiki                             | Group Mailing List | Group email to the contacts | ATLAS                            | CMS                            | THEORY                      |                        |                                  |
|---|--------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|------------------------|----------------------------------|
| <b>MCNet (Point of contact)</b>         |                    | Mail                        |                                  |                                | Simon Plätzer<br>(DESY)     |                        |                                  |
| <b>PDF (Point of contact)</b>           |                    | Mail                        | Joey Huston*<br>(Michigan State) | Josh Bendavid<br>(CERN)        | Maria Ubiali<br>(Cambridge) | Robert Thorne<br>(UCL) | Joey Huston*<br>(Michigan State) |
| <b>LHC EFT Working Group (Contacts)</b> |                    |                             | Nicolas Berger<br>(Annecy LAPP)  | Giovanni Petrucciani<br>(CERN) | Jorge de Blas<br>(Durham)   |                        |                                  |

(as from July 1st 2019)

| THEORY  |   |                                  |                                |
|---|---|----------------------------------|--------------------------------|
| Christophe Grojean (DESY and Humboldt University) | Daniel De Florian (UNSAM, Buenos Aires) | Michelangelo Mangano (CERN/LPCC) | Fabio Maltoni (Louvain)        |
| Gilad Perez (Weizmann Institute)                  | Laura Reina (Florida)                   | Carlos Wagner (Argonne/Chicago)  | Giulia Zanderighi (MPI Munich) |

## Introduction

One of the main purposes of the LHCHXSWG is to provide the experimental collaborations with information in various forms (reference cross sections, benchmarks, recommendations, codes,...). An expression of interest on a specific piece of information may come from experiment or theory (e.g., analysis contact persons, group conveners, or physics coordinators). Such requests should be communicated to the conveners of the working groups WG1-WG3 (collectively referred to as "WGs" in the following). Here we illustrate the guidelines that should be followed to insure a correct and efficient work and communication.

## General Principles

- Information on the activities of the LHCHXSWG should be fully public, open and accessible by

anyone, at any time.

- Vertical and horizontal information flow in the LHCHXSWG should be always guaranteed.
- Calls for action or help should be made in a transparent way, accessible also from outside the LHCHXSWG.
- Official LHCHXSWG deliverables are always subject to approval procedures before being publicly available (for details, see below).
- Personal and group focused initiatives as well as external collaborations with other groups should be supported. They should be open to anyone.

## Workflow

Here we outline a "normal" workflow in the LHCHXSWG. It is understood that in case of doubt, the WG conveners should consult the SC.

### 1) Submission of requests to the WGs

The conveners of the WGs promote and organize the activities in their groups. In addition, they are the contacts for requests from any internal or external source (e.g., ATLAS/CMS analysis contact persons, group conveners, physics coordinators or other groups like FCC, HL-LHC, or theorists). If the request is considered relevant by the conveners of the appropriate WG, they will define its scope and goals within the WG. If the request is deemed relevant but not-yet-feasible, the WG conveners propose it as an addition to an official LHCHXSWG wish-list, possibly with a priority grading. Such proposals are communicated to the SC and approved in coordination with the other WG conveners.

### 2) Publication of the activity and call to the LHCHXSWG

The WG conveners publish the approved activities (and/or the corresponding call-for-action) on their respective twiki page, with a description of the work to be done, the expected type of deliverables, and the approximated schedule (including a deadline for committing to contribute) and take corresponding actions to gather all the needed expertise from the community. People willing to contribute express their interest to the WG conveners. Depending on the exact request, deliverables are also identified (e.g., tables of numbers to be published on the twiki codes to be made public, lists of available results/codes, documents to appear on the arXiv<sup>?</sup>, etc.).

### 3) Work is performed

The WG conveners organize the work and collect the results and deliverables. Intermediate status reports can be given upon request from the SC and/or appear on the Twiki of the corresponding WG. Open discussions/meetings are regularly scheduled and announced via the LHCHXSWG mailing list.

### 4) Approval of the results

Once results and/or information corresponding to the request is available, the WG conveners inform the SC (typically in the regular SC-WG convener meetings) who either approve it directly or start an approval procedure, the details of which will depend on the actual deliverable. For example, in the case of a document to appear on the arXiv<sup>?</sup> in the name of the LHCHXSWG (as a whole or by a WG or by smaller groups), a WG-wide (yet light) review procedure will take place.

### 5) Publication of the results: see detailed discussion on the LHCHXSWG Library page.

## The announcement of new developments in the TH/MC/Tools

"The announcement of new developments in the TH/MC/Tools can be posted on the dedicated Wiki page if the authors consider it relevant for the all LHCHXSWG groups. The MCnet contact person supervises the

corresponding Wiki page and its maintenance. The submission of the news through LHCHXSWG e-mail lists should be avoided.

For the LHC HXSWG it is important that Monte Carlo (MC) information, even after detector simulation and with simple kinematic selections applied, may be exchanged between experiment and theory. This information must be non-controversial within the experiments and not compromise their independence. After feedback from the experiments we have defined the following rules in this respect:

**(1)**

Every figure or numerical information that is supposed to be used or shown in a public document, during a workshop, or a working group meeting requires sign-off by the corresponding collaboration. This also applies if only generator information and no detector simulation were used, as long as the MC is used within (and with the corresponding setup of) the collaboration.

**(2)**

For written documents, like e.g. notes on arxiv, the collaboration will have to prepare a short document to be circulated among all collaborators for comments and make this document public as well, to provide an official statement by the experiment. Usually such documents include the figures in question, captions that explain what is shown, and potentially some more text to give more specific information, e.g. how exactly a plot has been created. These documents can usually be published on a track of a few weeks. There can be cases though where more discussion within the collaborations may be required.

**(3)**

There can be a light approval for distributions/information only based on MC and meant to be shown on slides in meetings only. This consists of a sign-off by the Higgs conveners and physics coordination (PC) of the experiments. Depending on the content, the experiments may require an internal approval procedure as described in (2) for notice within the whole collaboration, for three days before approval.

**(4)**

The light approval ideally should be requested 1-2 weeks before the plots are meant to be shown in public, to give the experiments time to react.

**(5)**

Private discussions between a limited number of experimentalists and theorists, who would like to exchange material prior to such an approval, e.g. in preparation of a meeting, are allowed. If you plan such a private discussion, people should bring up the case with the corresponding experimental contact of the WG, so that the boundary conditions can be defined. These conditions include e.g.:

- exchange only of generator information (potentially including detector simulation);
- application of simple and well physics-motivated kinematic and/or topological selections;
- information exchange for a confined and well defined purpose and finite time span.

It should be understood that such exchanges are meant to be private and in the small circle of people involved in the specific purpose. The experimental contact of the WG should always be kept in the loop for such exchanges. Once the studies conclude and will be presented in public rules (1)-(4) apply. Two hypothetical examples are given in (\*).

**In case of remaining questions please contact the SC directly for further advice.**

**(\*)**

**Example-1:**

As follow up of ATLAS or CMS showing a  $p_T$  distribution with some modeling problems in a meeting, theory colleagues ask for a MC generator level rapidity plot with the same selection, or for the same plot, but

after applying some more restrictive generator selection or after changing some generator settings. This type of information can and should be exchanged. After solving the issue, new material illustrating the solution should be approved following rules (1)-(4).

**Example-2:**

For the discussion of an identified MC issue with experimental material that falls under (1)-(4) in some future meeting, the plots showing the issue can be exchanged with a few colleagues (e.g. generator authors) to ensure that the right type of information is presented in order to ensure an effective discussion.

---



- **Higgs cross sections and BRs in Spread sheet are available here in xlsx format.**
  - **Instruction for Higgs Cross Section Calculation at 13/14 TeV**
  - Link to the previous recommendations in CERN Report 3 for Higgs XS at 13&14 TeV (link to 7&8 TeV numbers there) and XS for  $M_H = 125.09$  GeV and BR.
- 
- Recommended values on SM Higgs XS for ggF, VBF, WH, ZH, ttH and tH at 13, 14 and 27 TeV (HL-HE Report) **NEW**
  - Recommended values on SM Higgs XS for ggF, VBF, WH, ZH, ttH bbH and tH at 7 TeV (CERN Report 4)
  - Recommended values on SM Higgs XS for ggF, VBF, WH, ZH, ttH bbH and tH at 8 TeV (CERN Report 4)
  - Recommended values on SM Higgs XS for ggF, VBF, WH, ZH, ttH bbH and tH at 13 TeV (CERN Report 4)
  - Recommended values on SM Higgs XS for ggF, VBF, WH, ZH, ttH bbH and tH at 14 TeV (CERN Report 4)
  - Recommended values on SM Higgs XS for ggF, VBF, WH, ZH, ttH bbH and tH for Ecm scan (CERN Report 4)
- 
- Recommended values on SM Higgs XS for HH production (CERN Report 4)
- 
- Recommended values on SM Higgs BR (CERN Report 4)
- 
- Recommended values on SM-like Higgs XS for ggF, VBF, WH, ZH, ttH bbH and tH at 7 TeV (CERN Report 4)
  - Recommended values on SM-like Higgs XS for ggF, VBF, WH, ZH, ttH bbH and tH at 8 TeV (CERN Report 4)
  - Recommended values on SM-like Higgs XS for ggF, VBF, WH, ZH, ttH bbH and tH at 13 TeV (CERN Report 4)
  - Recommended values on SM-like Higgs XS for ggF, VBF, WH, ZH, ttH bbH and tH at 14 TeV (CERN Report 4)
- 
- MSSM neutral Higgs: XS scans of the  $m_A$ - $\tan \beta$  plane
- 
- You can find more figures at our gallery here.
  - For BSM plots, please look at each XS and BR TWiki page linked above, ex. MSSM Neutral Higgs and MSSM Charged Higgs.
  - You can also find useful figures for talks/lectures at European Strategy page.

. . .

**Figure 1:** Standard Model Higgs boson production cross sections at  $E_{cm} = 13$  and  $14$  TeV as a function of Higgs boson mass and Higgs boson production cross sections as a function of the centre-of-mass-energies. The tH production cross section accounts for t-ch and s-ch only (no tWH production) [CERN Yellow Report 4].

. . .

**Figure 2:** Higgs boson production cross sections (SM-like coupling, NWA, no EW corrections) at  $E_{cm} = 13$  and  $14$  TeV [CERN Yellow Report 4].

. . .

**Figure 3:** Standard Model Higgs boson decay branching ratios [CERN Yellow Report 4].

**Figure 4:** Standard Model Higgs boson decay branching ratios and total width [CERN Yellow Report 3].

---

1. LHC XS group Library
2. Link to CDS [↗](#)
3. Generator setups used \* **Development only**\*

1. Inclusive Observables ( CERN-2011-002 [↗](#), arXiv:1101.0593) [↗](#).
2. Differential Distributions ( CERN-2012-002 [↗](#), arXiv:1201.3084) [↗](#).
3. Higgs Properties ( CERN-2013-004 [↗](#), arXiv:1307.1347) [↗](#).
  - ◆ BibTeX and LaTeX citation format for CERN-2011-002 (arXiv:1101.0593), CERN-2012-002 (arXiv:1201.3084) and CERN-2013-004 (arXiv:1307.1347).
4. Deciphering the Nature of the Higgs Sector ( CERN-2017-002 [↗](#), arXiv:1610.07922) [↗](#).

**LHC H XS WG gitlab** [↗](#) [↘](#)

Information on the old SVN (not to be used any longer):

|   |   |
|---|---|
| <b>SVN Information</b> <a href="#">↘</a>  | <b>WebSVN</b> <a href="#">↗</a> <a href="#">↘</a> |
| <b>CDS Information</b>                    | <b>CDS Collection</b> <a href="#">↗</a>           |
| <b>Instruction for CERN Yellow Report</b> |   |

|                                 |  |  |
|---------------------------------|--|--|
| <b>How to get CERN Account</b>  | <b>CERN Account</b> <a href="#">↗</a>  | How to manage CERN computing account.                |
| <b>InDico</b> <a href="#">↗</a> | <b>InDico Agenda</b> <a href="#">↗</a> | Group's workshop and subgroup meeting agenda system. |

- The address should have the prefix "lhc-higgs-" for any kind of mailing lists in our group.
- Posting the message is restricted to e-Group member lhc-higgs, i.e. you need to use your e-mail account registered to lhc-higgs mailing list.

| <b>How to subscribe Mailing List</b> |                                      |                                     |
|--------------------------------------|--------------------------------------|-------------------------------------|
|                                      | <b>address</b>                       | <b>alias</b>                        |
| <b>General</b>                       | <b>lhc-higgs@SPAMNOTcern.ch</b>      |                                     |
| <b>WG1:<br/>Higgs<br/>XS&amp;BR</b>  | <b>lhc-higgs-xsbr@SPAMNOTcern.ch</b> | <b>lhc-higgs-wg1@SPAMNOTcern.ch</b> |

|                                      |   |   |
|--------------------------------------|---|---|
|                                      |   |   |
| <b>WG2:<br/>Higgs<br/>Properties</b> | <b>lh-higgs-properties@SPAMNOTcern.ch</b>         | <b>lh-higgs-wg2@SPAMNOTcern.ch</b>          |
| <b>WG3: BSM<br/>Higgs</b>            | <b>lh-higgs-bsm@SPAMNOTcern.ch</b>                | <b>lh-higgs-wg3@SPAMNOTcern.ch</b>          |
| <b>Steering<br/>Committee</b>        | <b>lh-higgs-steering-committee@SPAMNOTcern.ch</b> | <b>lh-higgs-sc@SPAMNOTcern.ch</b>           |
| <b>WG1<br/>Convener</b>              | <b>lh-higgs-xsbr-convener@SPAMNOTcern.ch</b>      | <b>lh-higgs-wg1-convener@SPAMNOTcern.ch</b> |

|                          |  |  |
|--------------------------|--|--|
|                          |  |  |
| <b>WG2 Convener</b>      | <a href="mailto:lhc-higgs-properties-convener@SPAMNOTcern.ch">lhc-higgs-properties-convener@SPAMNOTcern.ch</a>       | <a href="mailto:lhc-higgs-wg2-convener@SPAMNOTcern.ch">lhc-higgs-wg2-convener@SPAMNOTcern.ch</a> |
| <b>WG3 Convener</b>      | <a href="mailto:lhc-higgs-bsm-convener@SPAMNOTcern.ch">lhc-higgs-bsm-convener@SPAMNOTcern.ch</a>                     | <a href="mailto:lhc-higgs-wg3-convener@SPAMNOTcern.ch">lhc-higgs-wg3-convener@SPAMNOTcern.ch</a> |
| <b>Subgroup Convener</b> | <a href="mailto:lhc-higgs-xsbr-subgroup-convener@SPAMNOTcern.ch">lhc-higgs-xsbr-subgroup-convener@SPAMNOTcern.ch</a> |  |

|   |                         |                           |                        |  |
|---|-------------------------|---------------------------|------------------------|--|
| <b>The 16th General Assembly Meeting at CERN 2019</b> | <b>Oct. 16-18, 2019</b> | <a href="#">Home page</a> | <a href="#">Agenda</a> |  |
| <b>The 15th General Assembly Meeting at CERN 2018</b> | <b>Dec. 10-12, 2018</b> | <a href="#">Home page</a> | <a href="#">Agenda</a> |  |
| <b>The 14th General Assembly Meeting at CERN 2018</b> | <b>Mar. 26-27, 2018</b> | <a href="#">Home page</a> | <a href="#">Agenda</a> |  |
| <b>The 13th General Assembly Meeting at CERN 2017</b> | <b>Jul. 13-14, 2017</b> | <a href="#">Home page</a> | <a href="#">Agenda</a> |  |
| <b>The 12th General Assembly Meeting at CERN 2016</b> | <b>Oct. 12-14, 2016</b> | <a href="#">Home page</a> | <a href="#">Agenda</a> |  |
| <b>Preparatory Meeting</b>                            | <b>July 7-8, 2016</b>   | <a href="#">Home page</a> | <a href="#">Agenda</a> |  |
| <b>The 11th General Assembly Meeting at CERN 2016</b> | <b>Jan. 13-15, 2016</b> | <a href="#">Home page</a> | <a href="#">Agenda</a> |  |
| <b>The 10th General Assembly Meeting at CERN 2015</b> | <b>July 15-17, 2015</b> | <a href="#">Home page</a> | <a href="#">Agenda</a> |  |
|   |                         | <a href="#">Home page</a> | <a href="#">Agenda</a> |  |

|  |                     |                           |                        |                         |
|--|---------------------|---------------------------|------------------------|-------------------------|
| <b>The 9th General Assembly Meeting at CERN 2015</b> | January 22-24, 2015 |                           |                        |                         |
| <b>The 8th General Assembly Meeting at CERN 2014</b> | June 12-13, 2014    | <a href="#">Home page</a> | <a href="#">Agenda</a> | <a href="#">Minutes</a> |
| <b>The 7th Workshop at CERN 2012</b>                 | Dec. 5-6, 2012      | <a href="#">Home page</a> | <a href="#">Agenda</a> |                         |
| <b>The 6th Workshop at CERN 2012</b>                 | May 24-25, 2012     | <a href="#">Home page</a> | <a href="#">Agenda</a> |                         |
| <b>The 5th Workshop at LAL 2011</b>                  | Nov. 21-22, 2011    | <a href="#">Home page</a> | <a href="#">Agenda</a> |                         |
| <b>The 4th Workshop at BNL 2011</b>                  | May 4-6, 2011       | <a href="#">Home page</a> | <a href="#">Agenda</a> |                         |
| <b>The 3rd Workshop at Bari 2010</b>                 | Nov. 4-5, 2010      | <a href="#">Home page</a> | <a href="#">Agenda</a> |                         |
| <b>The 2nd Workshop at CERN 2010</b>                 | Jul. 5-6, 2010      | <a href="#">Home page</a> | <a href="#">Agenda</a> | <a href="#">Minutes</a> |
| <b>Inauguration Workshop in Freiburg 2010</b>        | Apr. 12-13, 2010    | <a href="#">Home page</a> | <a href="#">Agenda</a> | <a href="#">Minutes</a> |

- [Higgs\\_XSBR\\_YR4\\_update.xlsx](#): Higgs XS&BR Update (CERN Report 4, 2016)

This topic: LHCPHysics > LHCHWGexampleAfter  
 Topic revision: r374 - 2020-10-23 - PeterJones



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