

Higgs Toppings Workshop

Probing Top-Higgs Interactions at the LHC

Centro de Ciencias de Benasque Pedro Pascual, Benasque (Spain)

May 27-June 2, 2018

<http://benasque.org/2018higgs/>

First bulletin

The workshop is approaching and we are looking forward to exciting discussions with you in Benasque. A few weeks ago, you must have received an official acceptance letter from the Benasque secretaries. Some actions were needed on your side to confirm your participation and to book your accommodation as well as the bus transportation from Barcelona. Please make sure that you have followed the instructions from the Benasque secretariat.

Here is some information about the plan for the workshop:

1. We have gathered a list of topics that we would like to have covered during the workshop. Each topic will be introduced by an overview talk. There will be 2-3 such talks each morning, and the schedule will be kept deliberately light to allow for plenty of time for discussions. The program can be found at <https://indico.cern.ch/event/727396>. Note that all talks and speakers are confirmed, but the details of the schedule may still change.
2. The goal of the plenary talks is to identify important open questions and to trigger discussions that will be followed up in the course of the week during informal breakout sessions. Some of the proposed topics for the breakout sessions are:
 - **$t\bar{t}$ +jets/heavy-flavor modeling** (includes state-of-art predictions, comparisons between ATLAS and CMS on systematics treatment, proposed measurements to tune theory predictions, etc).
 - **Data-driven background estimation techniques** (includes multilepton and multi-b-jets final states).
 - **Statistical methods** (includes profiling of systematic uncertainties, combinations, what information to include in publications, etc).
 - **New developments in experimental techniques** (e.g. jet flavor tagging, jet charge, color flow, matrix element method, machine learning, etc).
 - **New developments in theory** (e.g. new observables, new ideas to extend scope of current analyses, etc).

We are already planning on some short informal talks related to some of these topics. Please contact us if you would like to suggest particular talks, or additional discussion topics. The various discussion topics and the main outcome of the breakout sessions will be summarized at the

end of the workshop.

3. The center offers plenty of office rooms and open space for informal discussions and collaborative work, which is the primary goal of this workshop.

On the logistic side (see the [webpage](#) for details):

- A bus ride will be organized on Sunday May 27 afternoon from Barcelona to Benasque. You need to book a seat if you plan to board this bus. There will be a return bus from Benasque to Barcelona on Saturday June 2 morning. You need to book a seat too.
- A reception will be organized on Monday May 28 and a farewell drink on Friday June 1.
- There is no lunch/dinner service at the science center but there are many restaurants nearby offering good food (and wine) for a reasonable price.
- The current plan is that Friday morning will be free to give you an opportunity to relax or go on a hike. We may change this to a different day depending on the weather forecast for that week.

See you soon in the Spanish Pyrenees,

Florencia, Aurelio, Stefano, Elizaveta and Michael

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