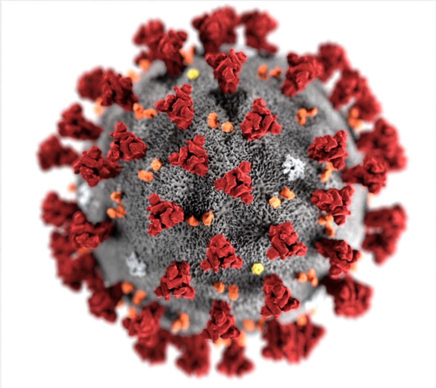
Thanks to ….

- To this years (actual) local organisers of HEFT:
  Adrian Carmona, Mikael Chala, Jose Santiago, Ilaria Brivio, Tyler Corbett, Gauthier Durieux
  for being so accommodating to tack this discussion on to the end of this years HEFT, and running a very successful version despite



- I counted, at least, 10 speaker laments that people were not able to visit Granada this year. It has been suggested by many that next year HEFT could maybe come to Granda physically to make up for the virtual version. (assuming Covid19 is under control).

- Seems a good idea to me.. If you have an alternate location suggestion for HEFT next year, traditionally requests are sent to the current ad hoc local committee. So please do so. An ***unbiased and objective decision*** :) will be made.

Comments/suggestions re org:

- HEFT presents a useful example of flat non-hierarchical collaboration. There is no standing long term org committee, there is no international committee to consult. It is a flat structure. Its mutual interest bringing people together.

- This is quite unusual for a meeting, but, it is still in its 8th year and a useful discussion forum.

- Related suggestion re EFT WG operation:
  Let us try and keep it as flat in organisational hierarchy as possible.
  Less hierarchy, more science.

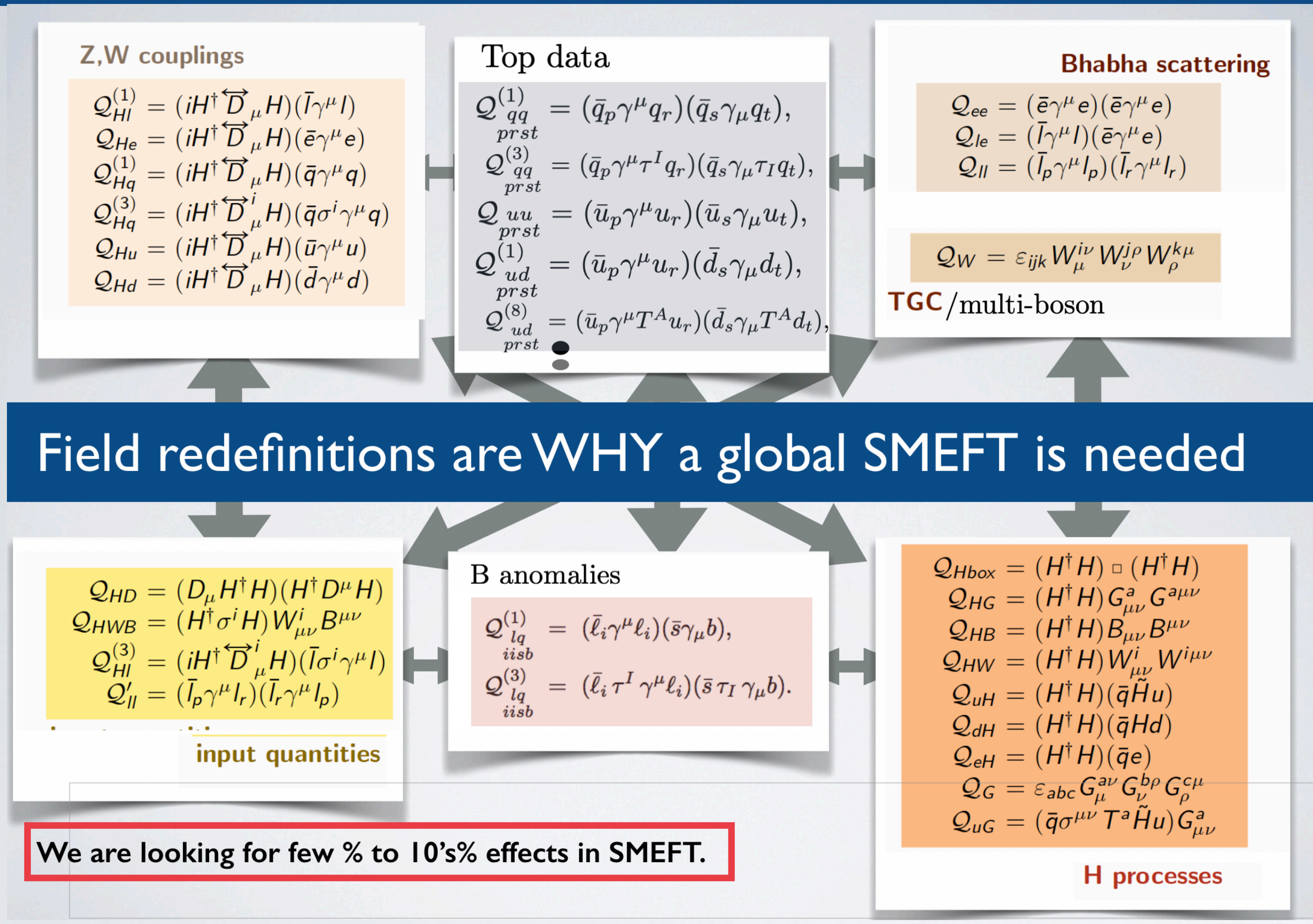
- HEFT has no official documents or conference proceedings. No common notes aggregating what is published, with the corresponding, inevitable, editing issues.

- Some WG notes and documentation is required - granted. And always very time consuming. *Let us keep documentation and notes to the true minimum necessary.*

  Less WG notes, more published papers (on the TH side), more science.

- Might make sense to tack on a EFT WG meeting to the end of HEFT yearly. As the people involved are common to both efforts.

Physics goal comments.



- Decays of the Higgs at LO are under pretty good control now https://arxiv.org/abs/1906.06949:
- A physics goal, as discussed in HEFT talks. Execute global pole parameter + fit combined with LEP data.
- Physics of the SMEFT is not trivial and exciting. We are actually probing the geometric space defined by the Higgs. See related HEFT talks and https://indico.cern.ch/event/899189/

SMEFTsim paper https://arxiv.org/pdf/1709.06492.pdf

Class	Parameters	$n_f = 1$	$n_f = 3$
1	$C_W \in \mathbb{R}$	1	1
3	$\{C_{HD}, C_{H\square}\} \in \mathbb{R}$	2	2
4	$\{C_{HG}, C_{HW}, C_{HB}, C_{HWB}\} \in \mathbb{R}$	4	4
5	$\{C_{\substack{uH\\33}}, C_{\substack{dH\\33}}\} \in \mathbb{R}$	2	2
6	$\{C_{\substack{uW\\3r}}, C_{\substack{uB\\33}}, C_{\substack{uG\\33}}, C_{\substack{dW\\3r}}, C_{\substack{dB\\33}}, C_{\substack{dG\\33}}\}_{r\neq 1} \in \mathbb{R}$	6	10
7	$\{C^{(3)}_{\substack{Hl\\pr}}, C^{(3)}_{\substack{Hq\\pr}}, C^{(1)}_{\substack{Hl\\rr}}, C^{(1)}_{\substack{Hq\\rr}}, C_{\substack{He\\rr}}, C_{\substack{Hu\\rr}}, C_{\substack{Hd\\rr}}\}_{pr\neq\{(1,3),(3,1)\}} \in \mathbb{R}$	7	26
8 $(\bar{L}L)(\bar{L}L)$	$\{C_{\substack{ll\\\mu ee\mu}}, C_{\substack{ll\\e\mu\mu e}}\} \in \mathbb{R}$	1	1
	Total Count	23	46

Table 5. LO parameter counts in the general SMEFT flavour cases for n_f generations for a 'WHZ pole parameter' program. The parameters retained are those that lead to contributions to near on-shell regions of phase space, do not experience suppressions by light quark mases or GIM suppression when interfering with the SM, or violate CP and carry a resonant enhancement in this region of phase space.

State of the art Higgs properties

- Various operator based perturbations can appear