WG2 Higgs Properties topics

Inherent topics

- **Deviations**: κ-framework maintenance and upgrade
  - Rein in tHq, gg→ZH, H*, invisible, etc.
  - THU for κ (SM) [with WG1].
  - Extend to (parameterisations) of differential distributions?
    - Like p_T(H), m(VH), etc.
  - Are Spin-CP amplitudes good enough?
- **Measurements**: Effective Field Theory (including CP)
  - Tools' choices of basis.
  - "Rosetta stone" of bases.
  - Benchmarks for gradual increase of number of coefficients.
    - As done for κ: first μ, then (κ_f, κ_V), …, up to (κ_b, κ_τ, κ_t, κ_W, κ_Z, κ_g, κ_γ, κ_μ, $\kappa_{Z\gamma}$, κ_H)
  - THU for EFT.
  - Low mass new physics models [with WG3].
  - Connection to LHC Electroweak WG.

Acquired topics

- **EXP→TH interface**
  - Likelihoods: dimensions, scanning, packaging, publication, etc.
    - Decoupling-recoupling THU.
  - Fiducial cross-sections.
  - Interface the LHC Higgs Combination Group (ATLAS+CMS).
- **Looking ahead**
  - Double Higgs characterization [with WG1].
  - Identify limiting THU as EXPU decrease.

Ideas for the structure

- No plan for sub(sub(sub(sub)))groups.
  - Shared topics with other WGs treated ad hoc.
- But:
  - Dedicated meetings to different topics.
  - Dedicated documents on specific topics.