

FCC-hh physics and performance meeting 17/10/24 - introduction

Angela Taliercio, Birgit Stapf, Sarah Williams

Who are we?



Angela Taliencio

- CMS Higgs combination and EFT convener
- CMS Tracker deputy run coordinator



Birgit Stapf

- Previously ATLAS, now full-time FCC
- (BSM & SM) Higgs & di-Higgs studies, combinations, muon, electron & photon reconstruction



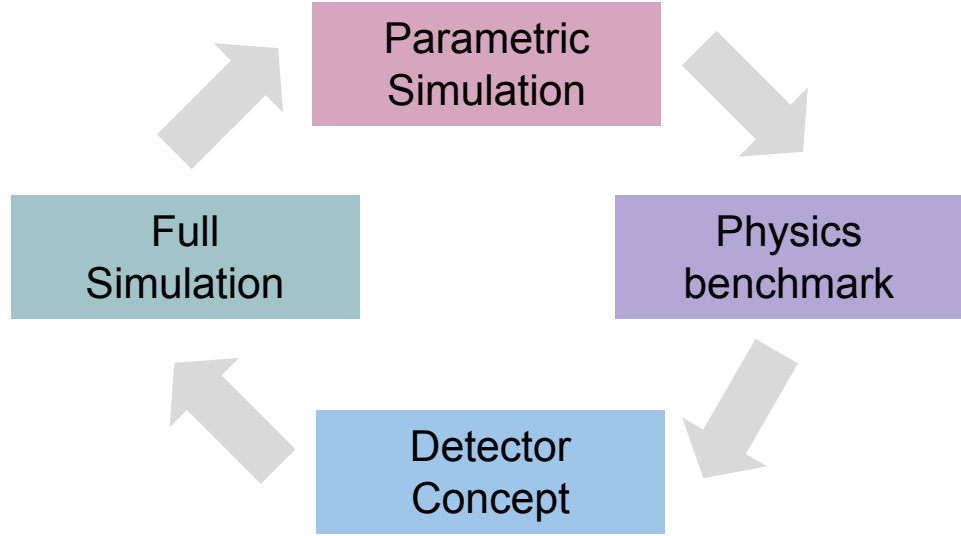
Sarah Williams

- ATLAS (searches and precision measurements, previously Statistics Committee chair).
- Active in FCC(ee) BSM studies.

Purpose of the group & meetings

- As discussed in the [kick-off on September 3rd](#), the aim is to expand the physics and performance studies for FCC-hh ahead of the next **European Strategy Update** (deadline for community input **31st March 2025**).
- Time is short, so we will need to be streamlined. We hope to benefit from common tools and workflows (including MC samples).
- We hope to understand (and support) ongoing efforts in the community, and identify opportunities for newcomers to get involved.

Scope of the work



Performance studies

Physics studies

Meeting structure & plans

Want these meetings to be relatively informal to encourage collaboration and enable trouble-shooting

In addition to scheduled talks and **tutorials**, will include a regular **roundtable**

Future dates for meetings:

- 14/11/2024
- 12/12/2024

Please sign up to the mailing list: *fcc-ped-hh-physicsperformance-espp25@cern.ch*

Additional useful information on FCC-hh github page: *[\[Link\]](#)*

Today's agenda

16:00 → 16:10 **Introduction**

Speakers: Angela Taliencio (Northwestern University (US)), Birgit Stapf, Sarah Louise Williams (University of Cambridge (GB))

🕒 10m



16:10 → 16:25 **Round-table**

Discussion from ongoing studies

🕒 15m



16:25 → 16:50 **Jet flavour tagging at FCC-hh with transformer architecture**

Speaker: Wei Sheng Lai (UCL)

🕒 25m



16:50 → 17:20 **Hands-on software tutorial**

Speaker: Birgit Stapf

🕒 30m

