

Roundtable

Savannah Clawson

DESY SM group meeting

Tuesday 29th July, 2025

HELMHOLTZ



What am I working on?

- **Photon-induced WW**

- Heavily involved in [observation analysis](#)
- Unfolded dilepton kinematic distributions in follow-up [differential analysis](#)

- **Photon-induced $\tau\tau$**

- Author of [pheno study](#) into prospects of constraining tau g-2 in LHC pp collisions
- Analysis contact for [\$\gamma\gamma \rightarrow \tau\tau\$ in pp analysis](#)
- Also involved in [ATLAS heavy ion \$\gamma\gamma \rightarrow \tau\tau\$ analysis](#) (mostly through supervision)

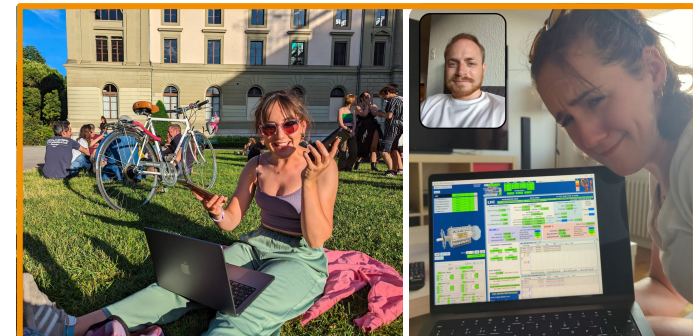
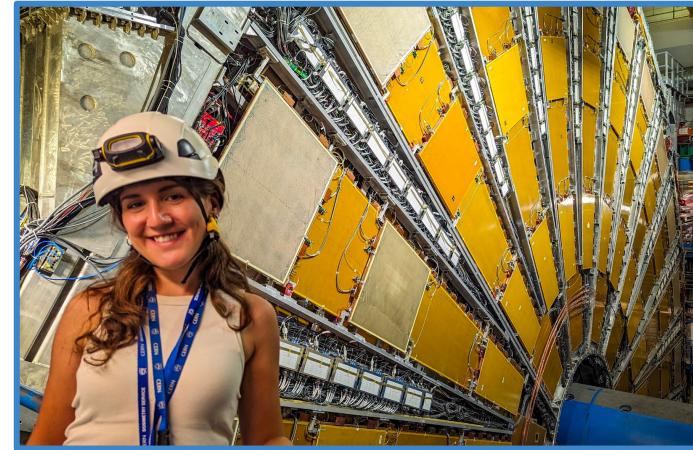
- **NEW! Minbias in pO collisions**

- **Forward proton CP**

- No longer convener of [AFP CP group](#)!!
- Involved in [ALPs+AFP analysis](#) via CP
- Hosting upcoming [ATLAS Roman Pots General Meeting](#) at DESY

- **Soft-QCD convener**

- Convenership started on 1st Jan 2025



Also lots of operations at CERN as AFP on-call expert

AFP on-call during July

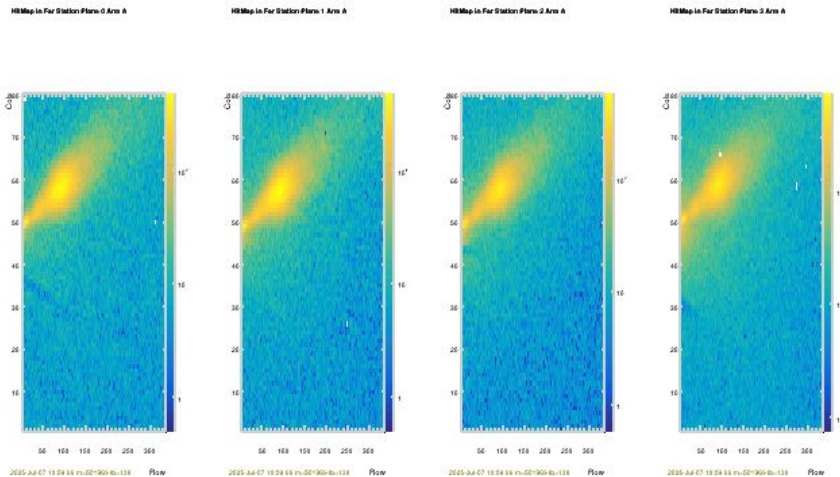
- Two weeks as the AFP on-call expert at CERN
 - During the oxygen and neon campaign, as well as pp mini ramp up
 - Went underground during neon stable beams, didn't get irradiated..



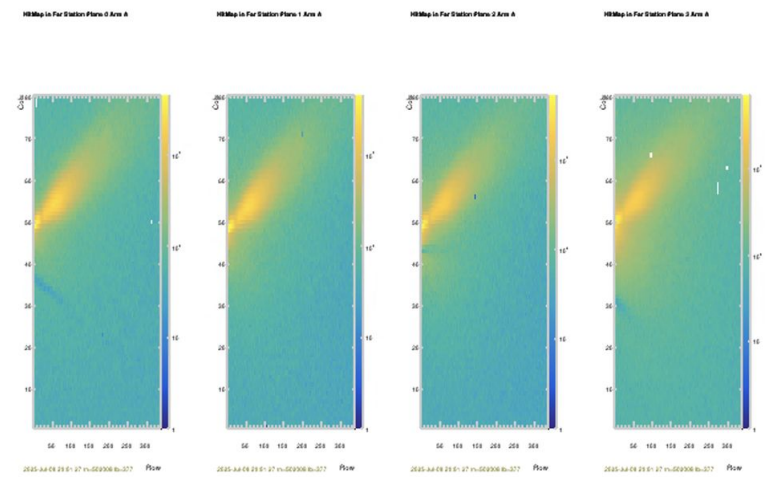
AFP on-call during July

- Already seeing interesting differences between AFP hit maps between oxygen and neon runs!
 - Could this be different nuclear species hitting the detector?
 - Or maybe trigger effects..?
 - Offline analysis to come :)

Oxygen-Oxygen hit maps:

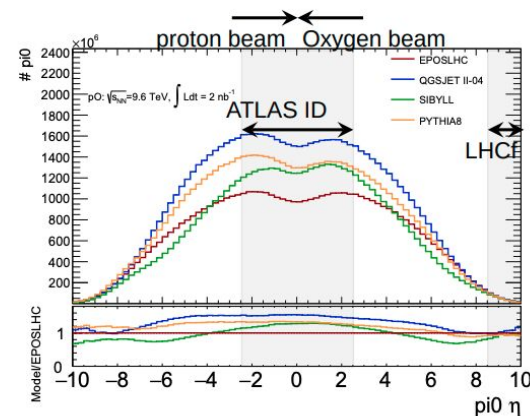
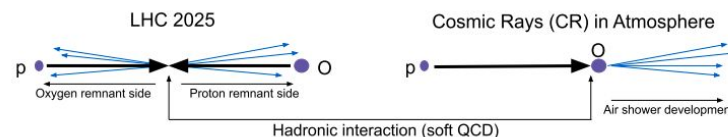
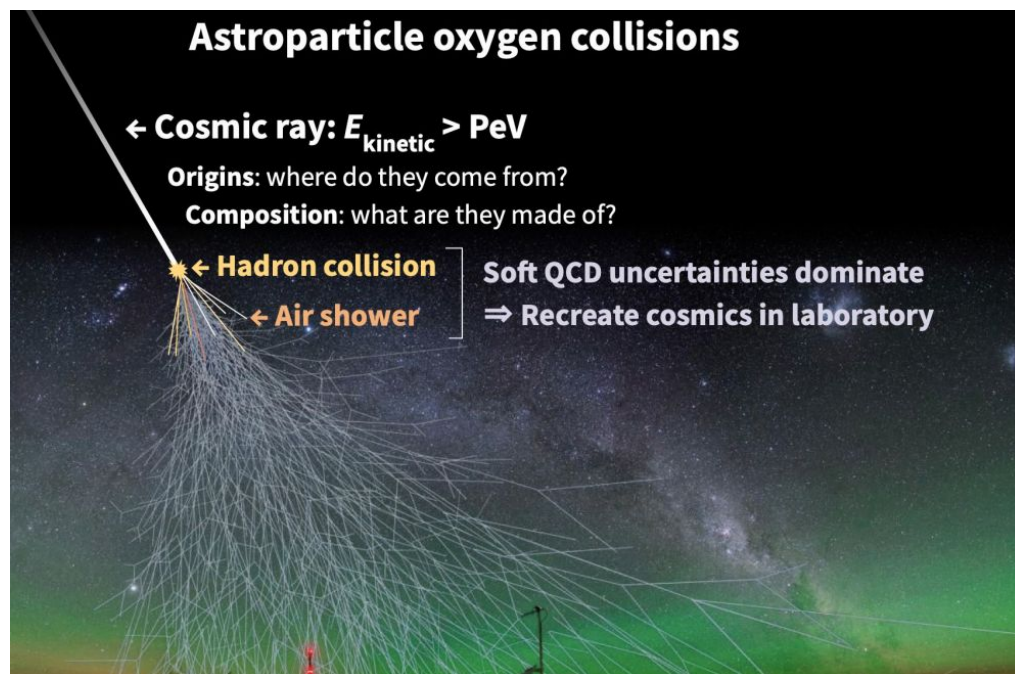


Neon-Neon hit maps:



Minimum bias in proton-oxygen

- Recently kicked-off in the soft QCD group: indico.cern.ch/event/1559575
 - Aim is to measure track distributions in pO data
 - New collision system at the LHC, never studied before!
 - Will be highly valuable to the astroparticle community for cosmic ray studies



Holiday



Weddings



Backup
