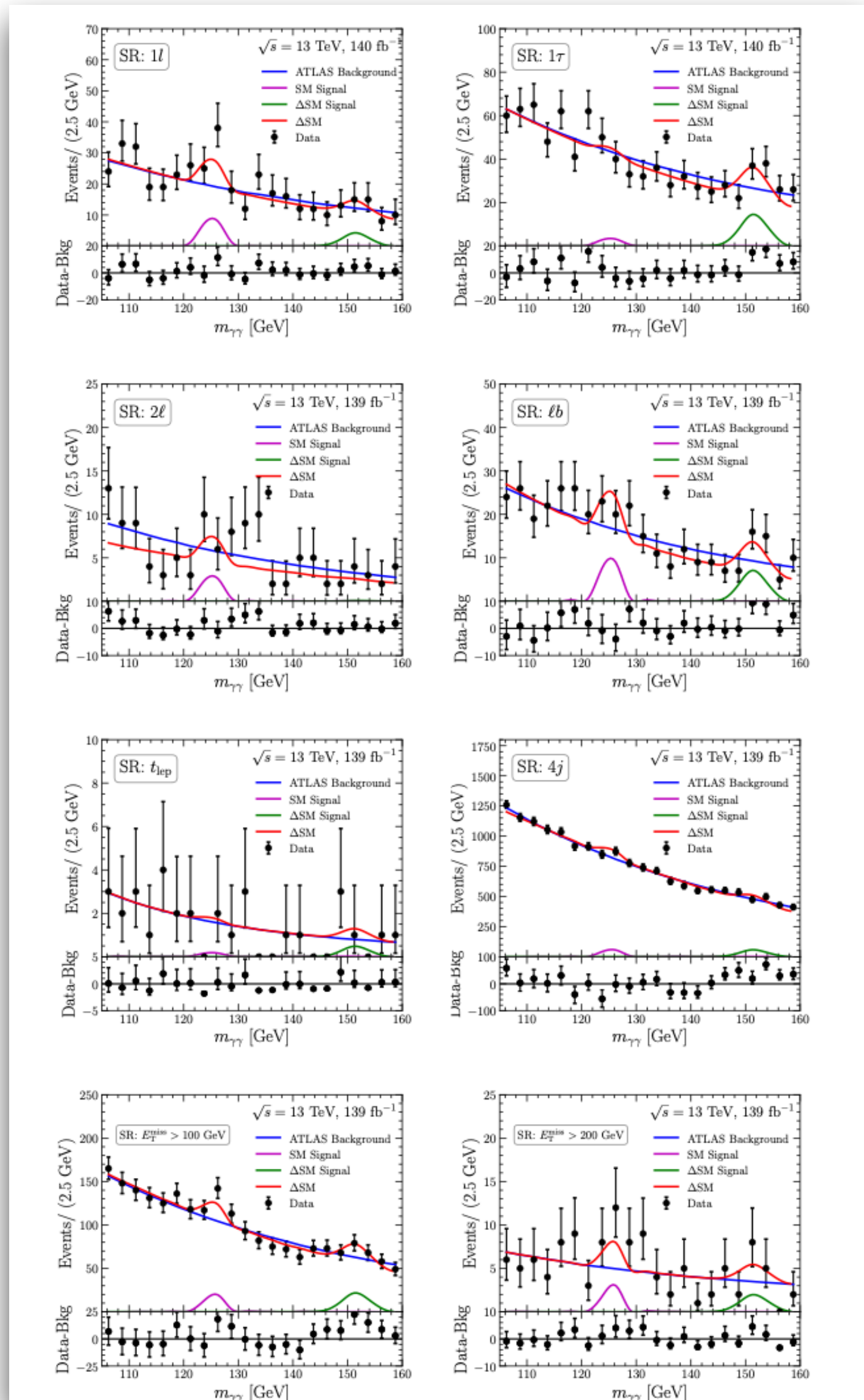




# HL-LHC - part 2



Hints?!

## Anomalies in Higgs-related final states

Intriguing excesses near 152 GeV

in several channels in 



, what do you see?

*No answer at the moment...*

ATLAS paper: JHEP 07 (2023) 176

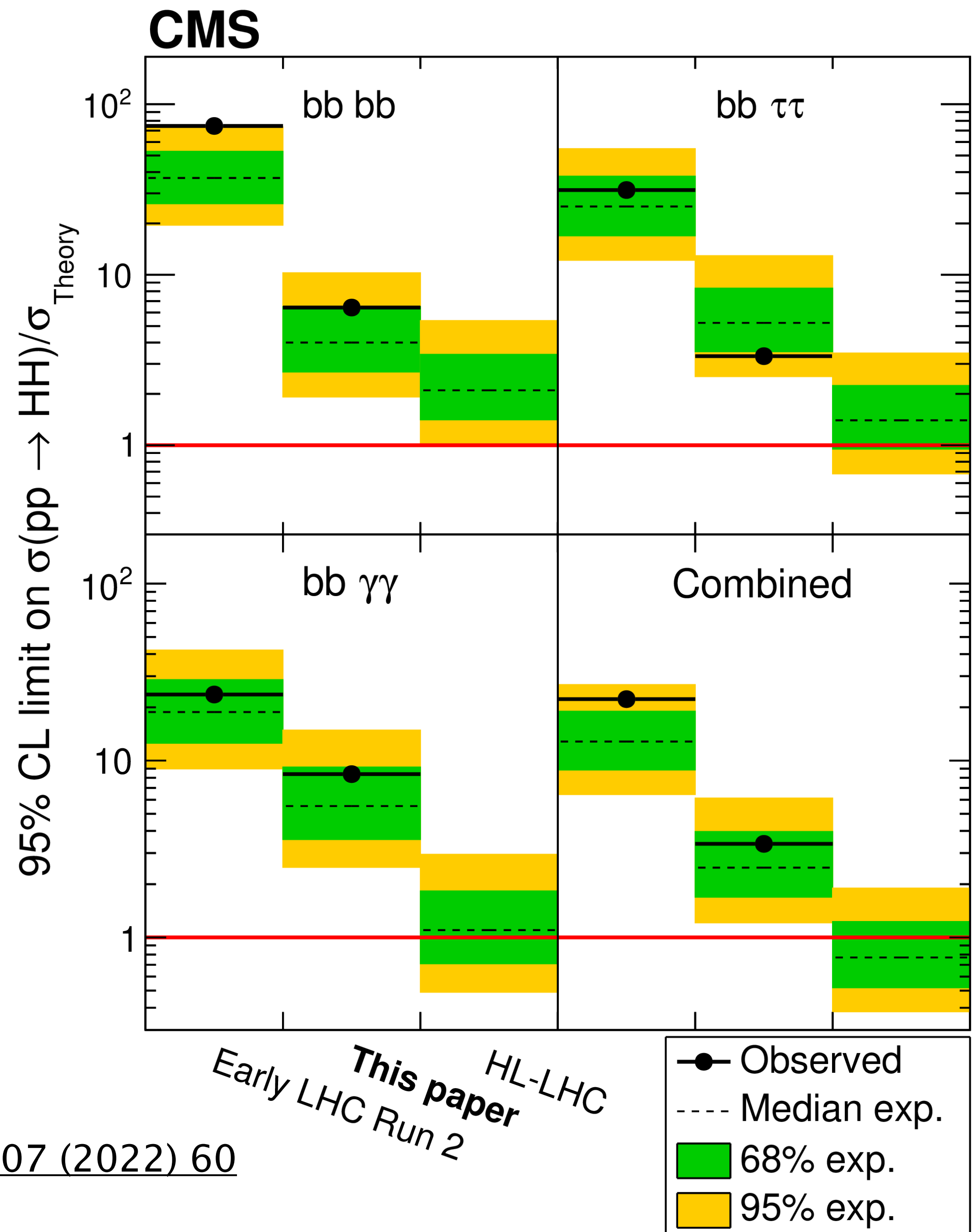
No excess observed

Crivellin, Ashanujjaman, Banik, Coloretti, Maharathy, Mellado, arXiv:2404.14492

# HH

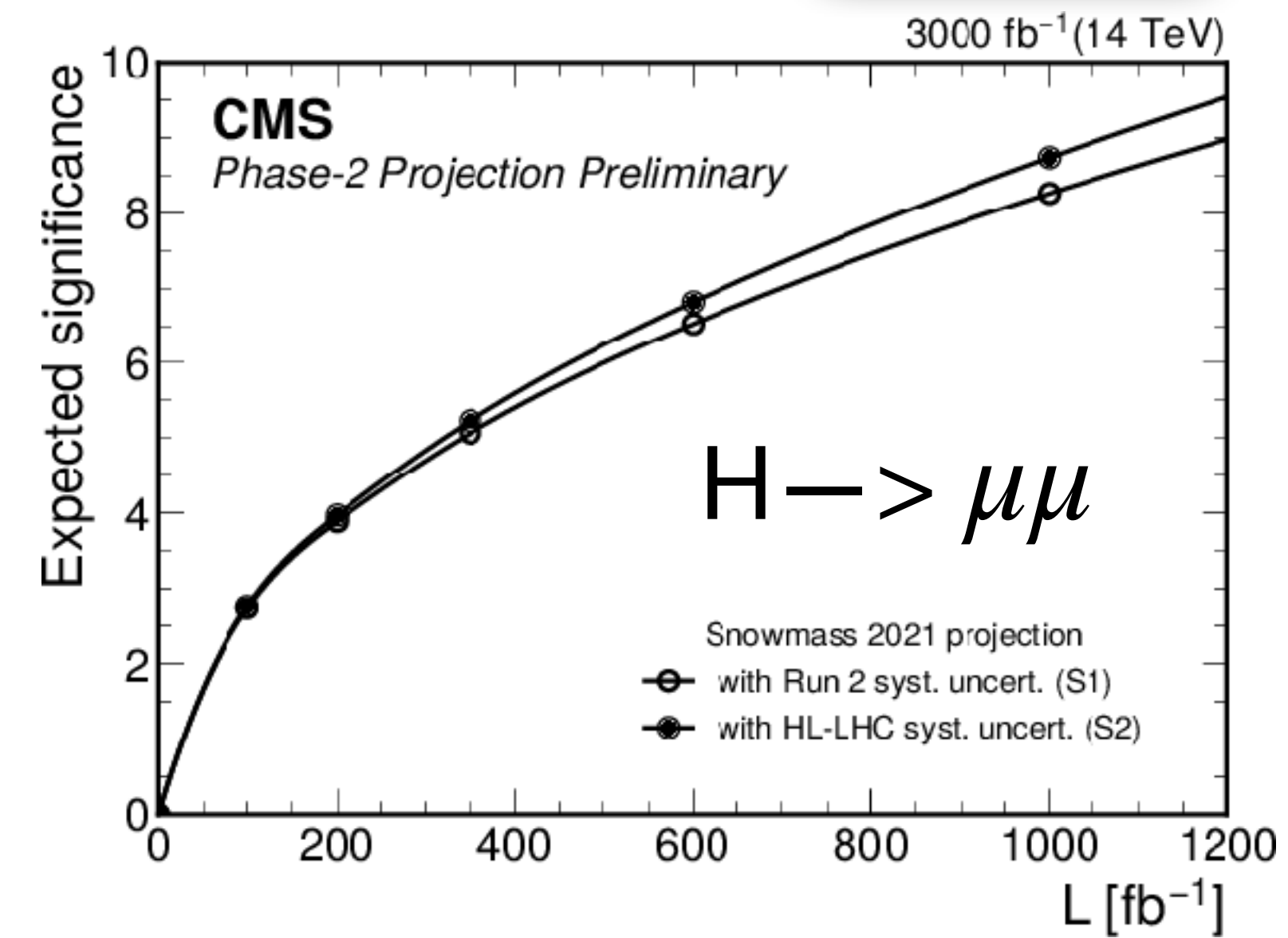
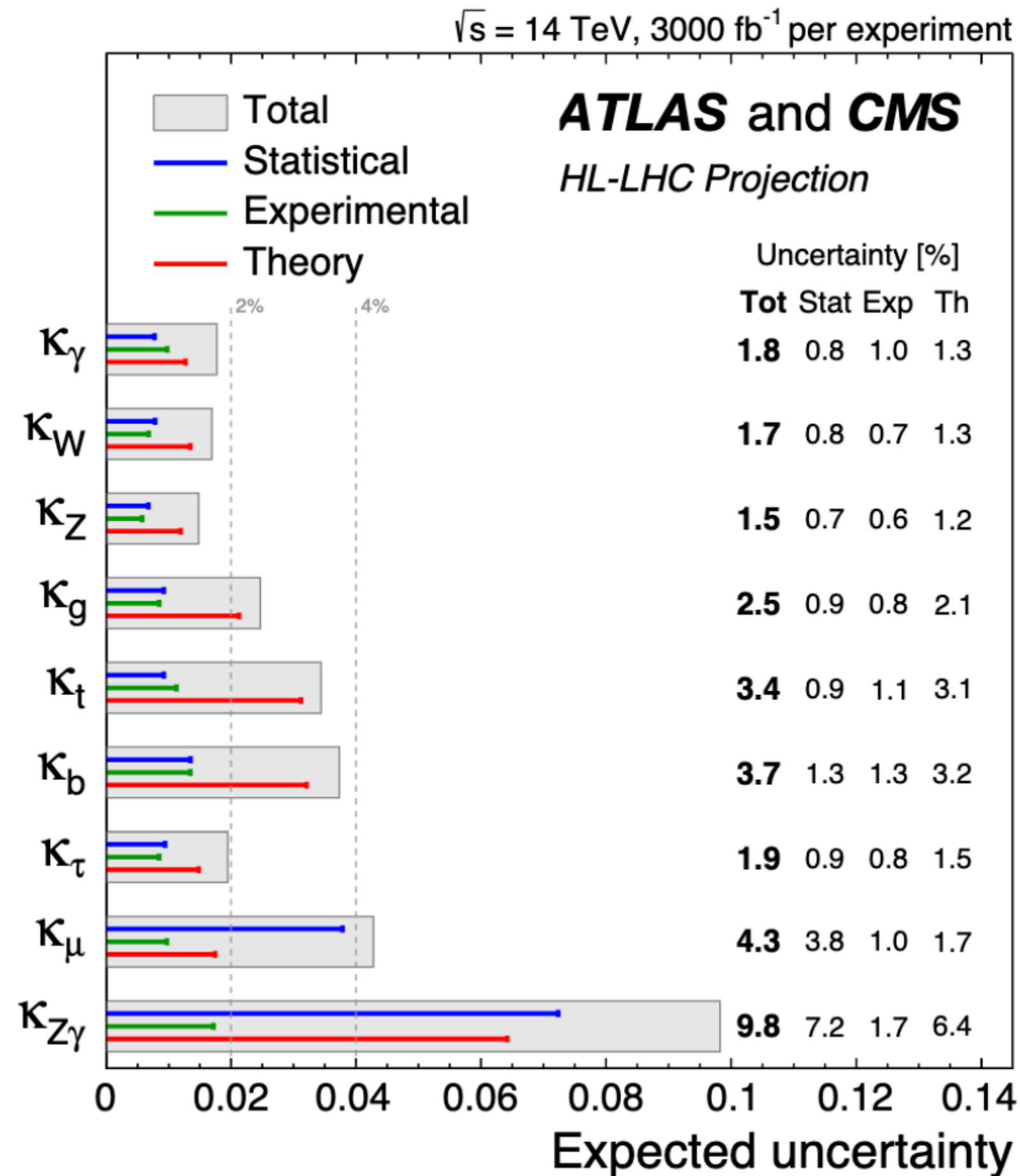
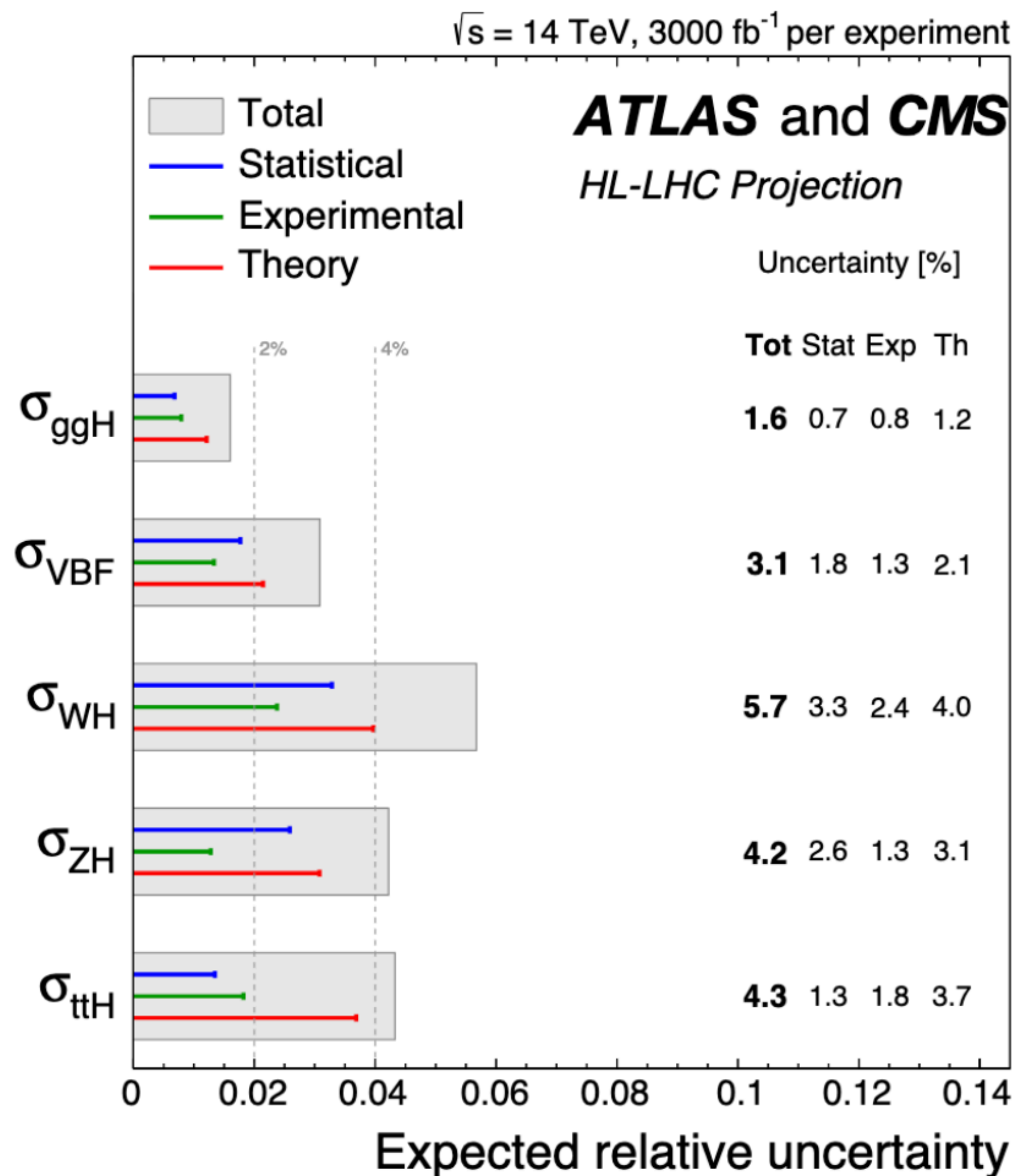
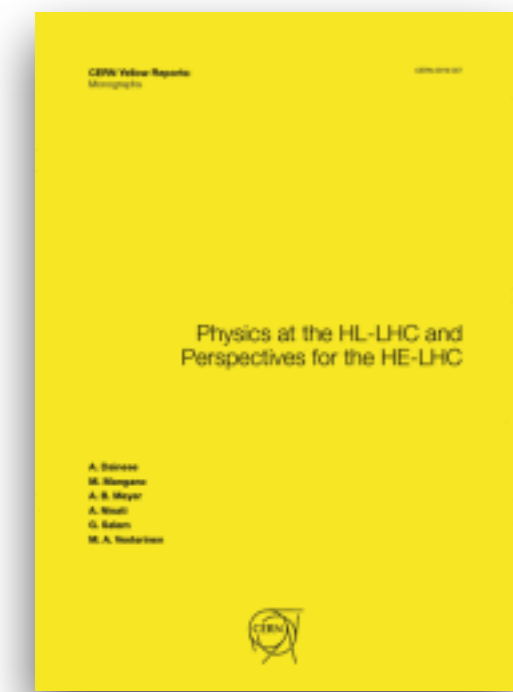
## CMS projections

- Evolution from Run 2
- Promising prospects for the future



# Yellow report - Time to update?

At least the highlights and important legacy contributions

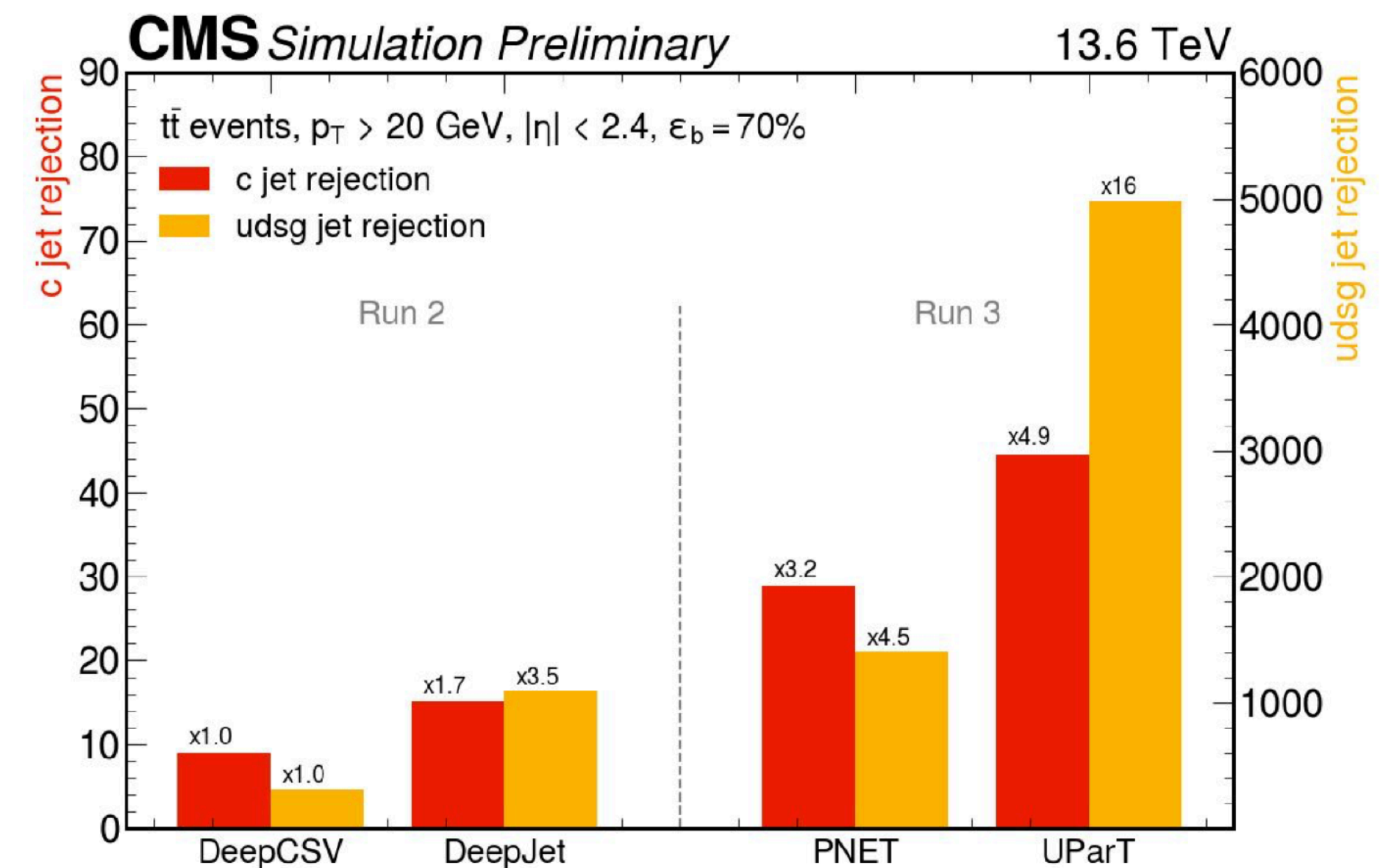
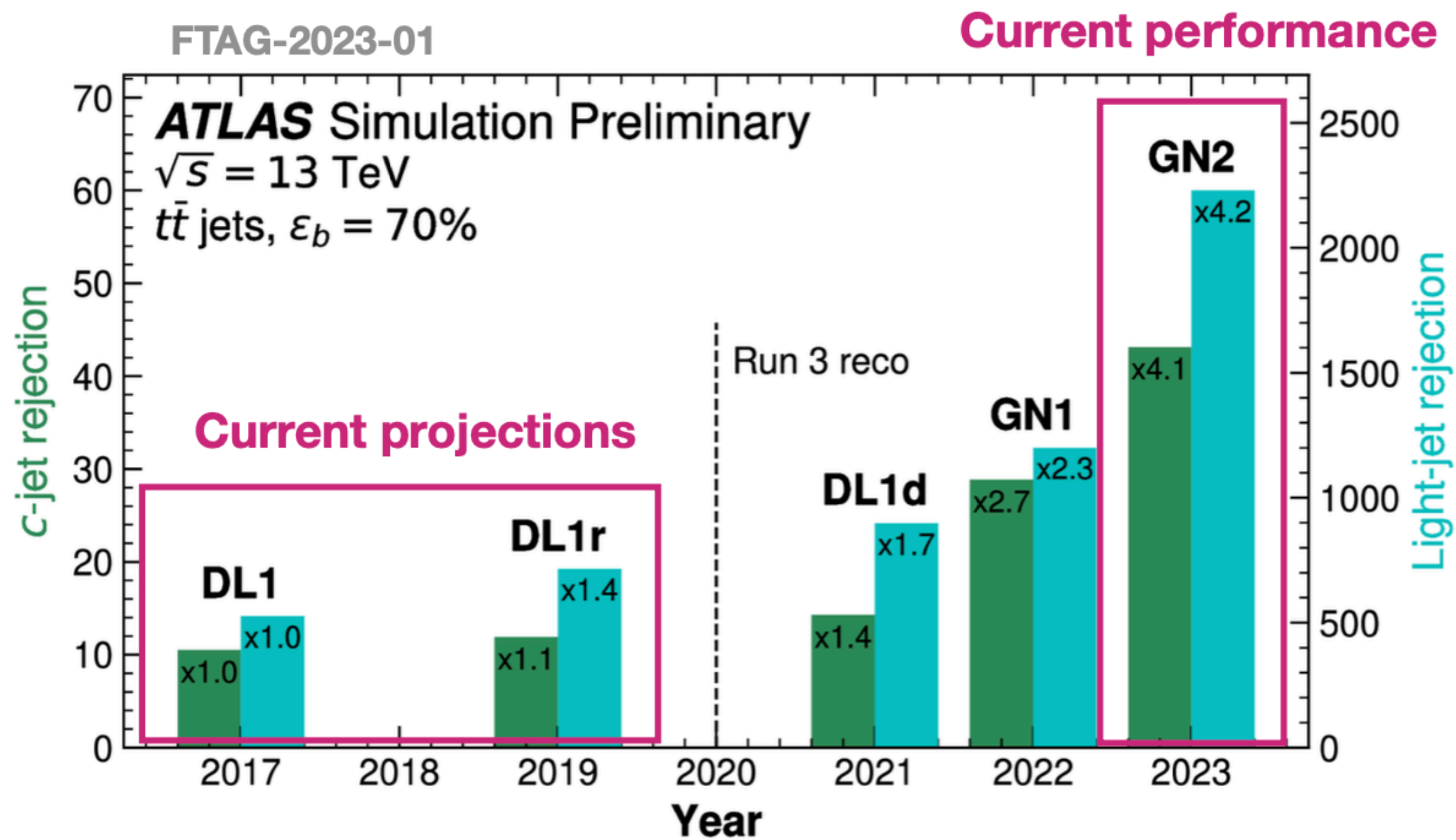


And more - many ideas at this conference

# HL-LHC Projections - it is okay to be optimistic

## Many improvements since 2019 Yellow Report

### Jet Flavor Tagging

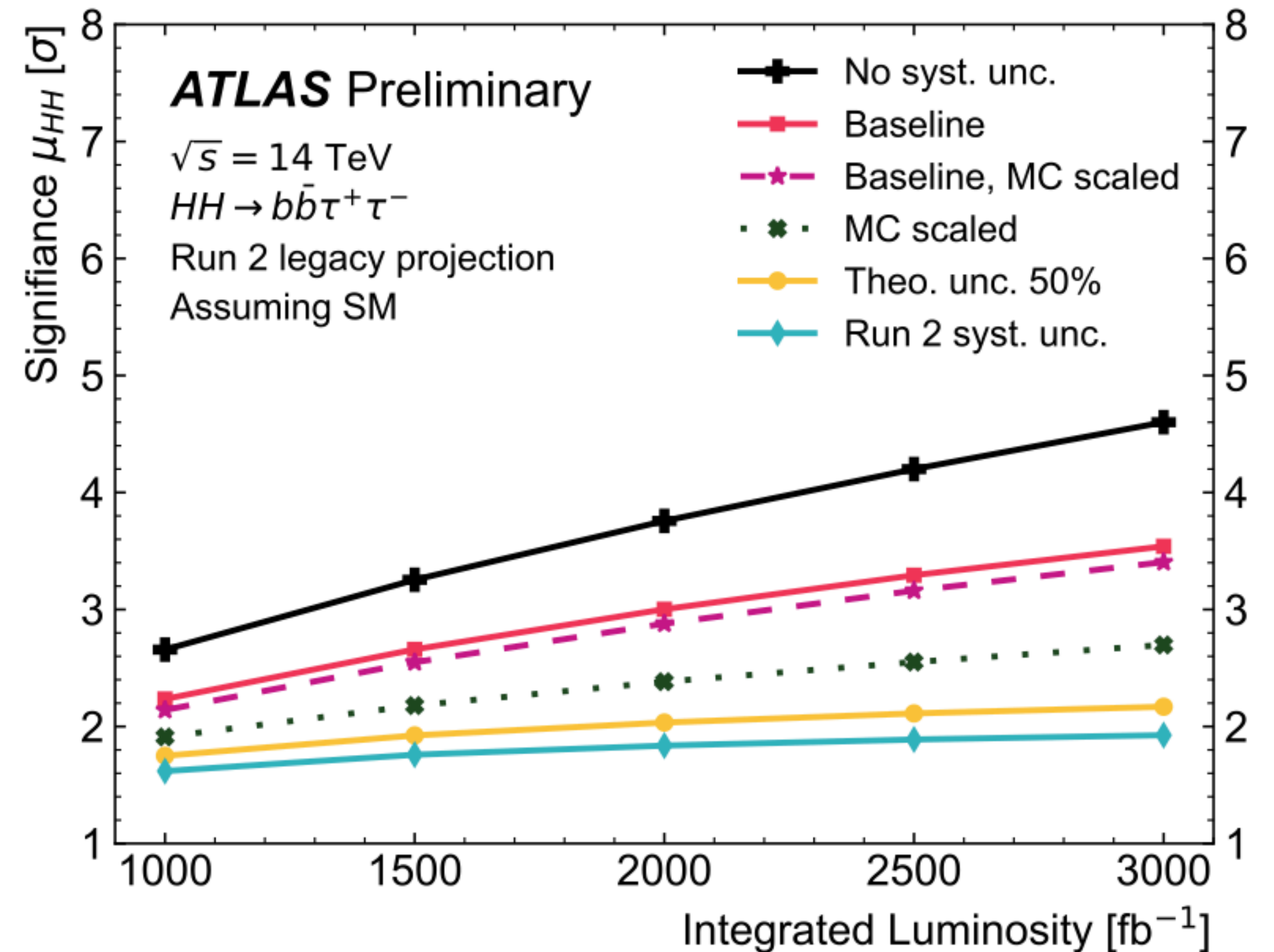
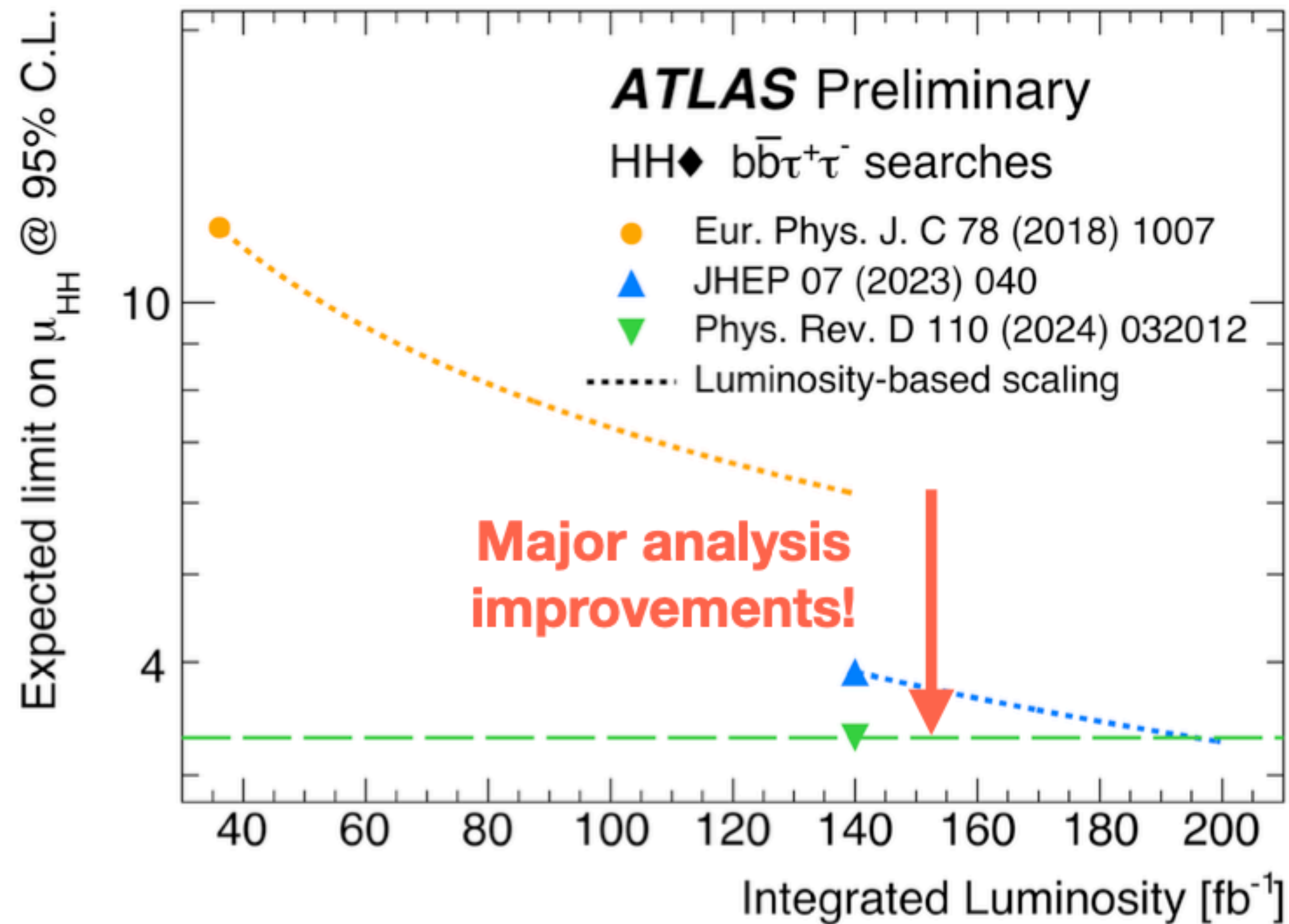


CMS-DP-2024-066

# HH projections

## Example from ATLAS - $bb\tau\tau$

ATL-PHYS-PUB-2024-016



See also talk from [F. Haslbeck](#)

