



Polarisation study

December meeting

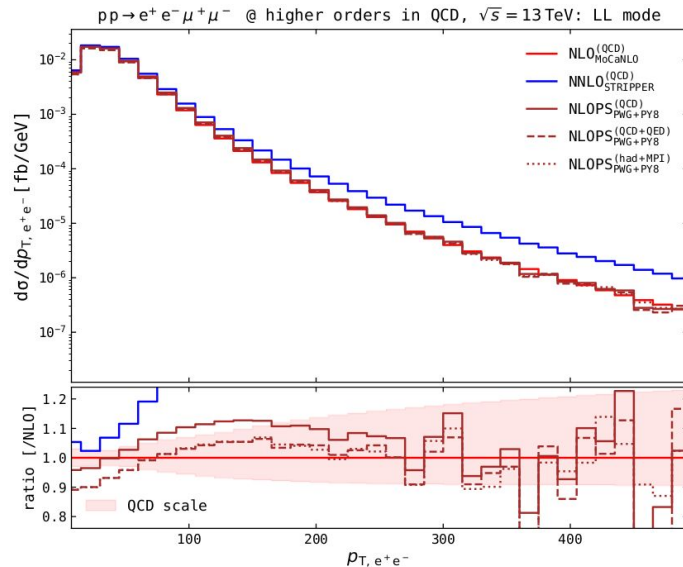
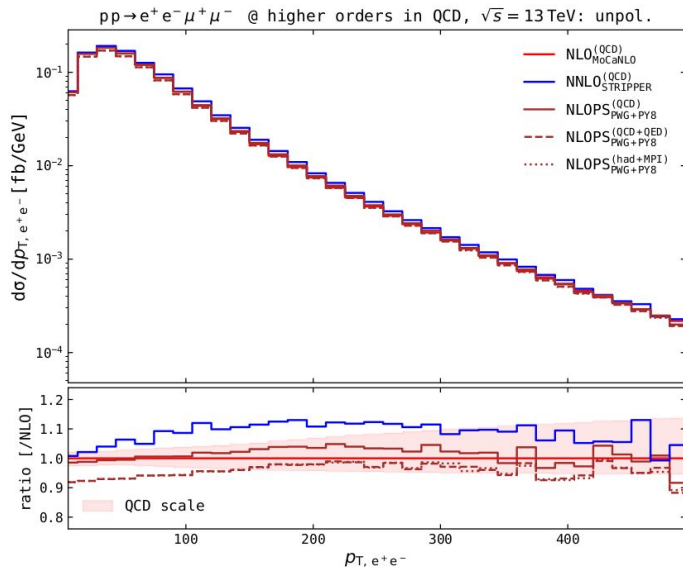
19.12.2024

Giovanni Pelliccioli

PS matching & merging

- **LOPS** provided by **Sherpa & POWHEG**, LOPS (no merging) possible with MG5?
- **MG5 LO merging**: discrepancy **fixed** between CMS and MG5 authors
- **NLOPS** runs in **PWG ready** (QCD, QCD+QED, QCD+QED+hadr+MPI)
- **Sherpa** runs at **nLOPS & multi-jet merging** to come soon

PS matching



ATLAS & CMS input and planning

- **CMS**: missing **LT/TL** for LO multijet merging
- **ATLAS**: results not provided yet, no feedback

Next meeting: week **last week of January 2025**

Deadline for results by ATLAS: **31 January 2025**

Proposed plan: complete draft by **mid February**, submit to arXiv by **end of February**

Results interpretation & writing

- [Article](#) structured, relevant plots selected for F.O.: $M(4l)$, $p_T(e^+)$, $\Delta\phi(e^+e^-)$, $\cos\Theta^*(e^+)$
- Comparison [NLO QCD](#) vs [NNLO QCD](#) vs [SHERPA nLO](#) vs [POWHEG LHE](#)
- [DPA](#) vs [NWA](#) vs [off-shell](#) at LO unpolarised
- [git repo](#) please give feedback on results, or suggestions about structure