

Ideas for PB MC school

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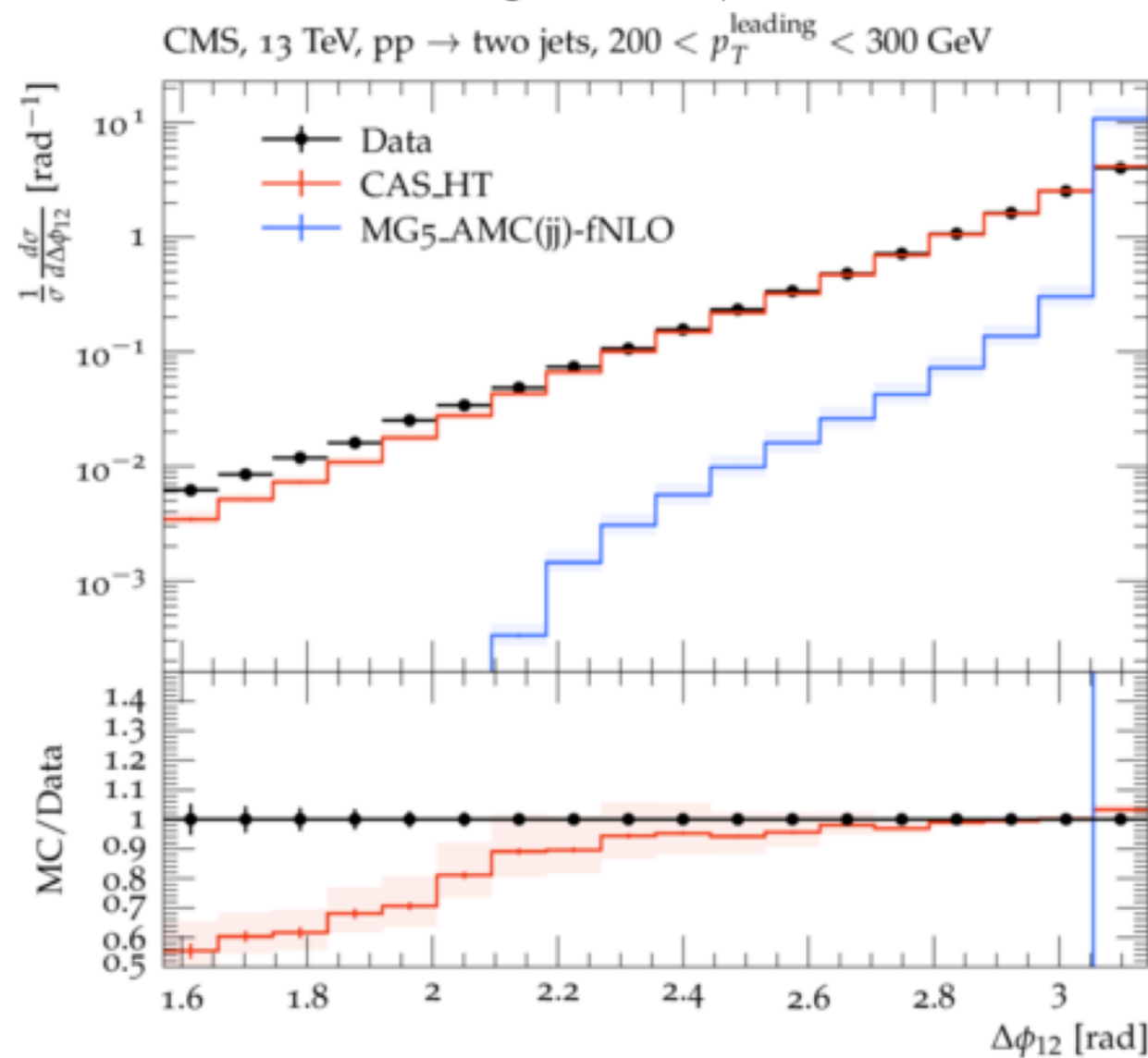
- REF 2021 15-19 Nov 2021 <https://indico.desy.de/event/28334/>
- Monte Carlo school before: 8-12 Nov 2021
- Goal:
 - educate students and researchers on PB method and Monte Carlo generator CASCADE
 - training to use it in LHC and other experiments
 - basic intro, not specialized work
 - calculate predictions and comparison with LHC measurements showing importance of PB TMD
 - produce a common publication out of these studies

Physics focus for PB MC school: $\Delta\phi$ in dijets

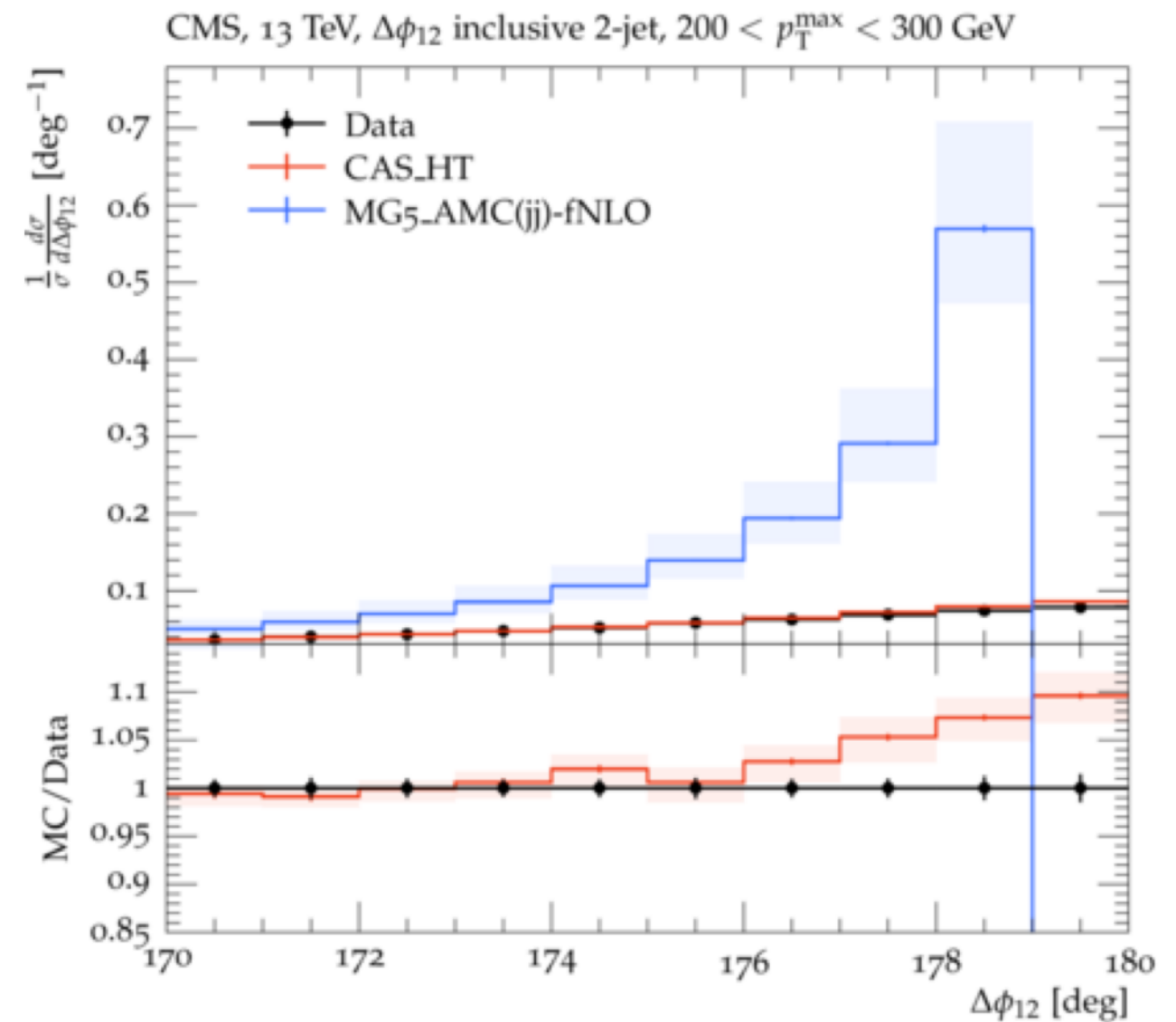
Use $\Delta\phi$ dijet measurements: comparison with fixed NLO (also with CASCADE3)

Rivet plugins: CMS_2018_I1643640 and CMS_2019_I1719955

wide range in $\Delta\phi$

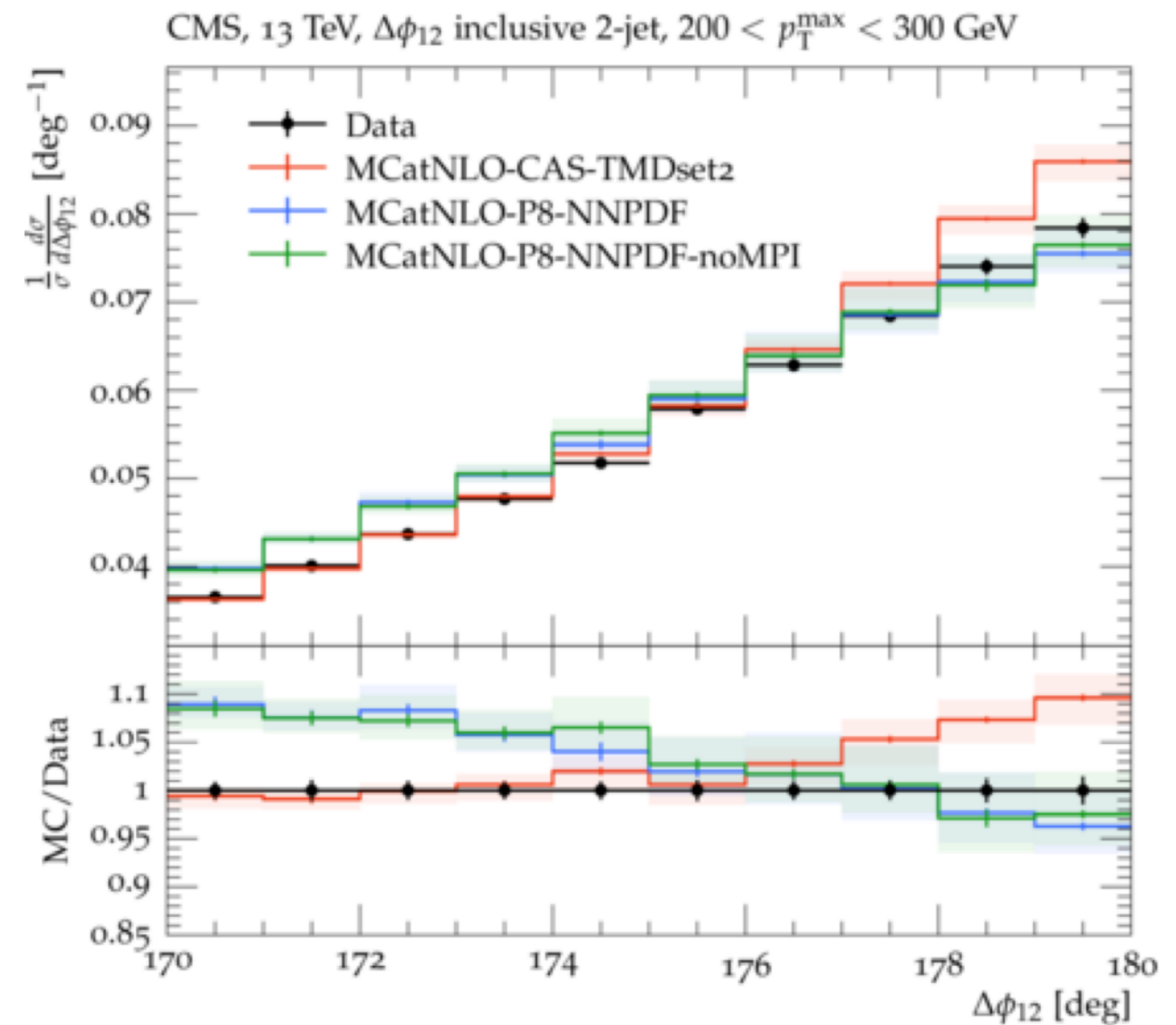
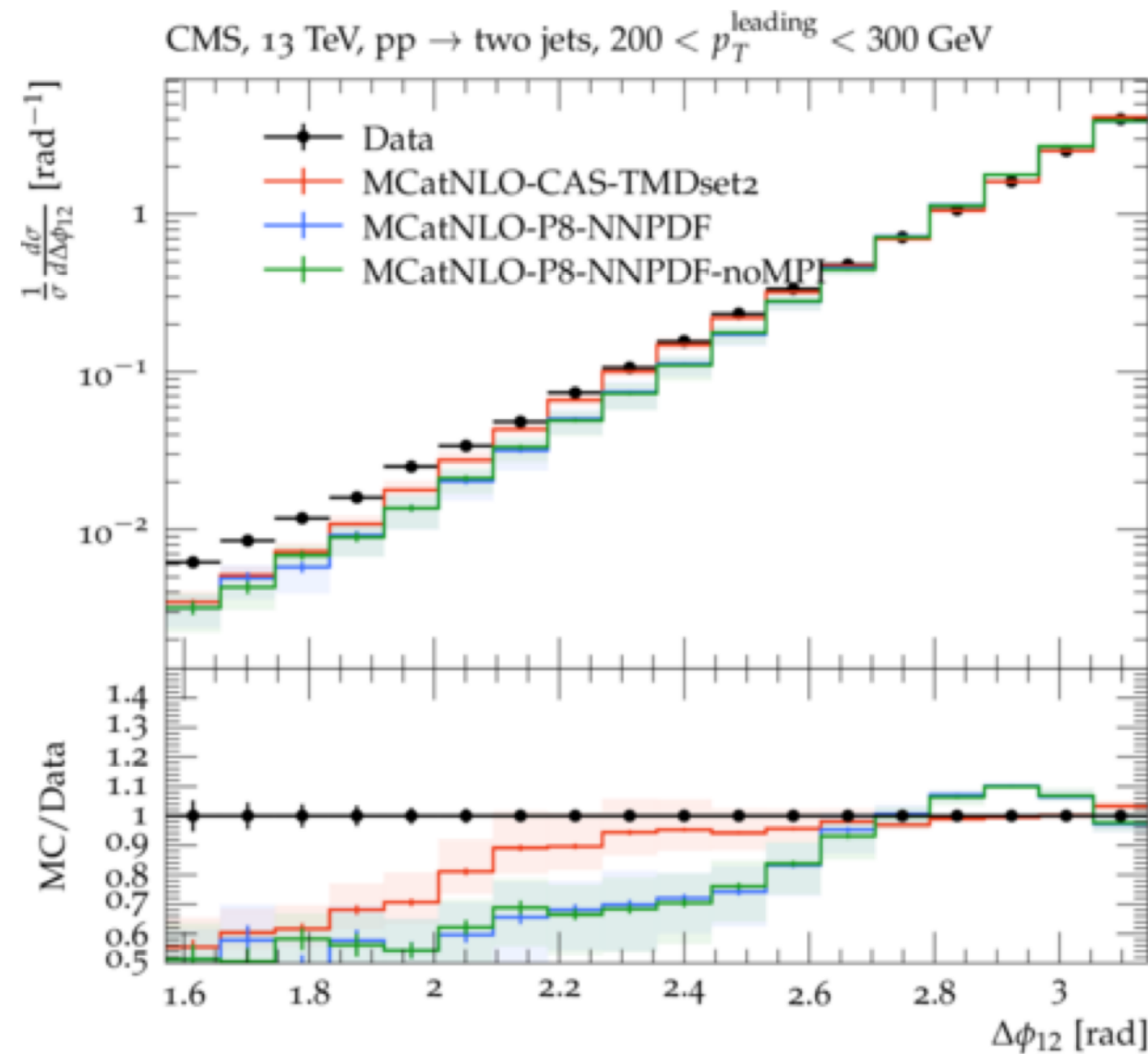


back-to-back region



Physics focus for PB MC school: $\Delta\phi$ in dijets

Use $\Delta\phi$ dijet measurements: comparison with P8 parton shower



Ideas for PB MC school

- Monday
 - 13:00 – 15:00: lecture on MC method, Parton Shower, Sudakov form factors
 - 15:00 – 16:00: technical setup at DESY for running CASCADE and Rivet
- Tuesday
 - 13:00 – 15:00: lecture on PB TMDs and all that
 - 15:00 – 16:00: analysis of Dijet data in back-to-back region
- Wednesday
 - 13:00 – 15:00: studying Parton Shower effects, free parameters
- Thursday
 - 13:00 – 15:00: continuation on PS and free parameters
- Friday
 - 13:00 – 15:00: preparation of contribution to REF and paper layout

Organization:

- Speakers ?
- Who could help with tutorials and exercises ?
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