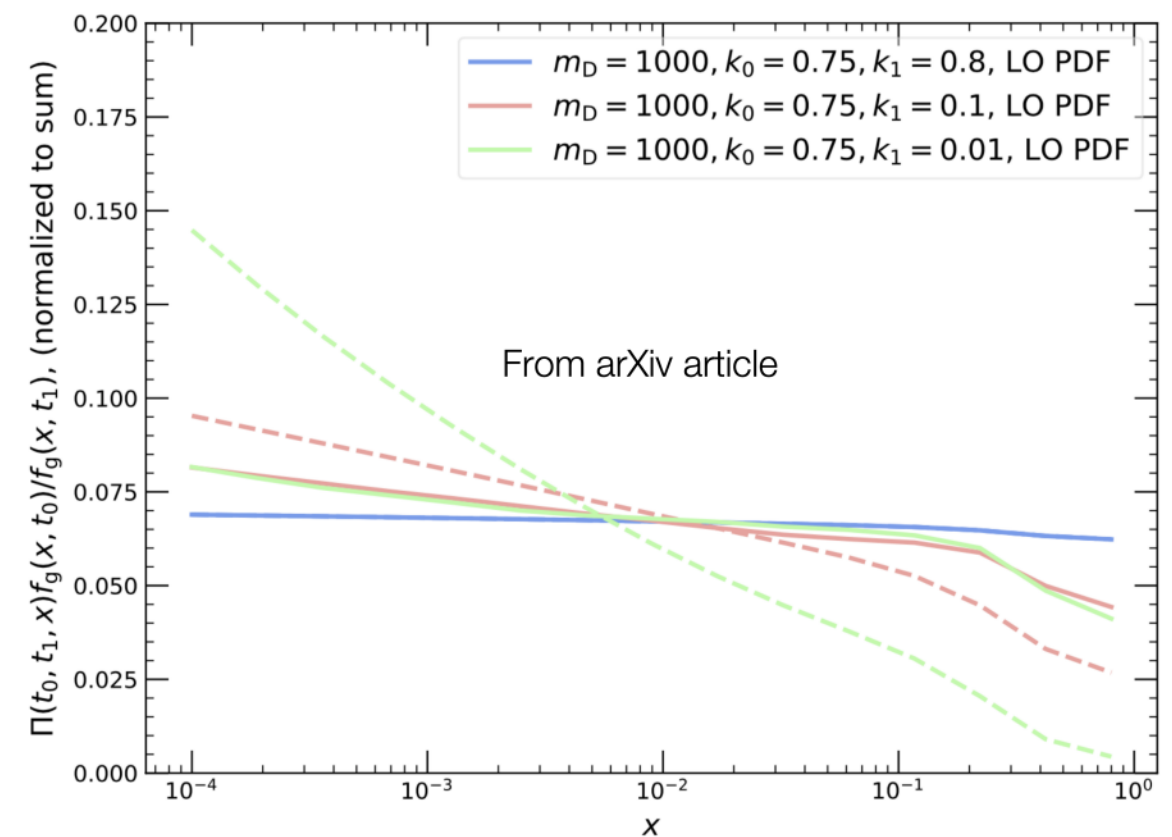
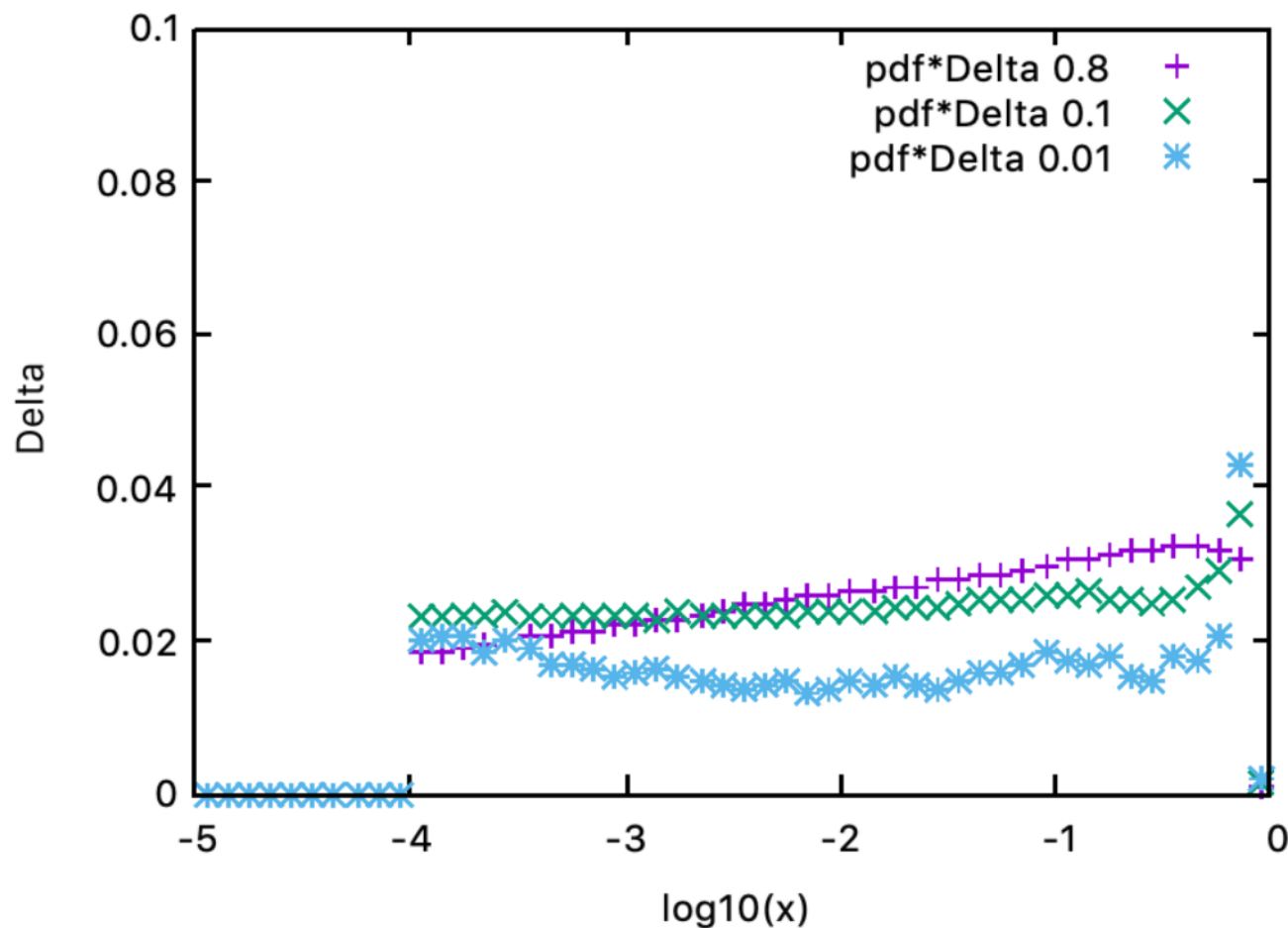


PB TMD meeting

- Hoping that you are all ok !

PartonShower checks

- Reproduce distributions from Les Houches report ([arXiv 2003.01700](https://arxiv.org/abs/2003.01700))
 - produce LHE file (for use with different shower: $x_1=0.98, x_2$ variable, fixed scale)
 - shower with different approaches
 - S. Prestel helps



(c) gluon evolution

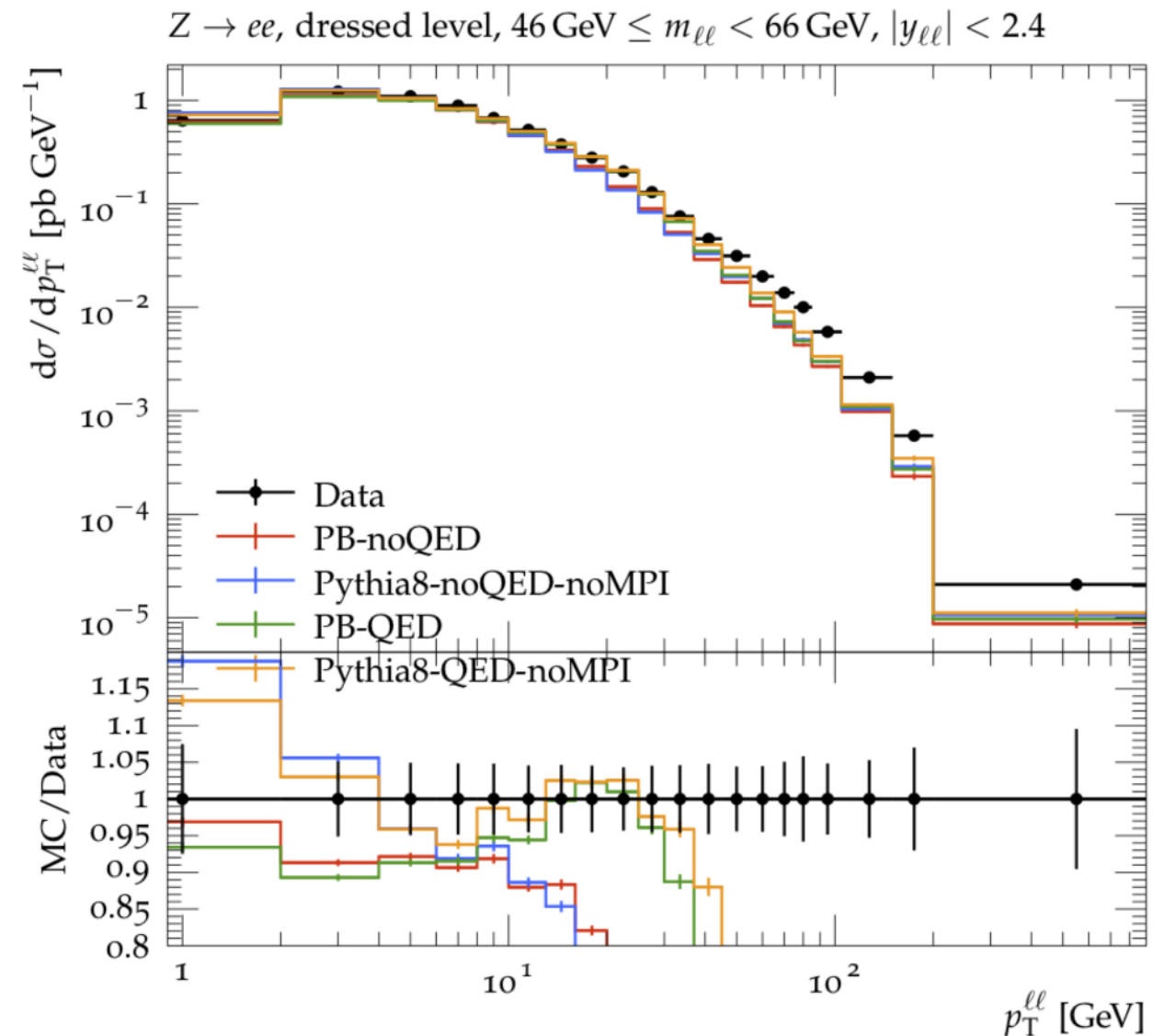
- Still a few items to understand....

TMDlib 2.0

- TMDlib2.0 is ready
 - to be uploaded today on: <https://tmdlib.hepforge.org/>
 - still one issue with memory in YAML interface ...
 - M. Rohrmoser (Cracow) is looking into it
 - are features missing ?
 - multiple TMD sets in fortran interface is ready for next version
 - for uncertainties (by identifier)
 - for different hadrons pA (by identifier)
- What to do with extrapolations ?
 - TMDlib1: values were frozen at phase space limits
 - keep this approach
 -

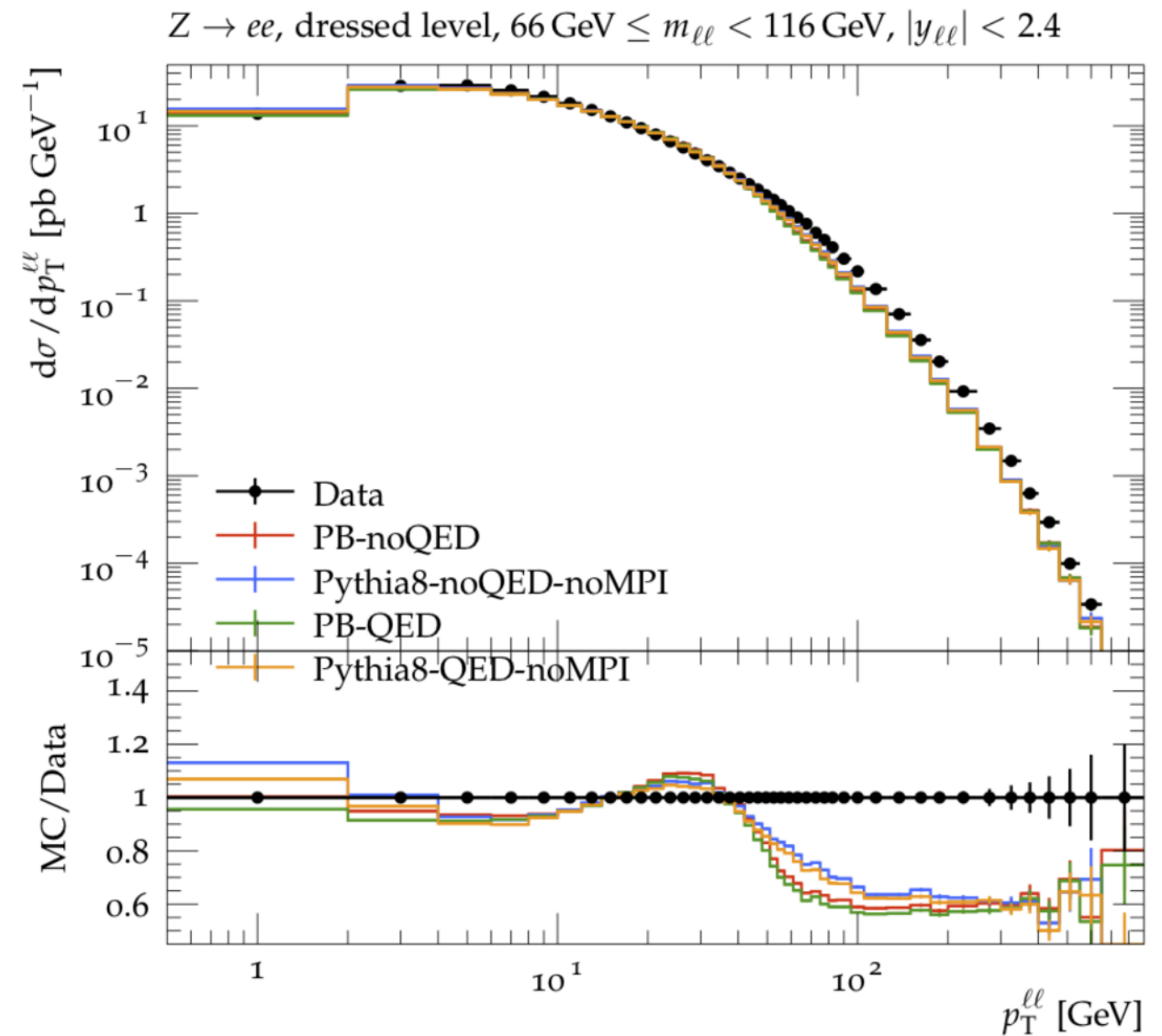
QED radiation from lepton pairs in CASCADE & P8

- DY at NLO (from aMCatNLO) - comparison to ATLAS 8 TeV measurement
 - PB TMDs
 - P8 shower
- low DY mass



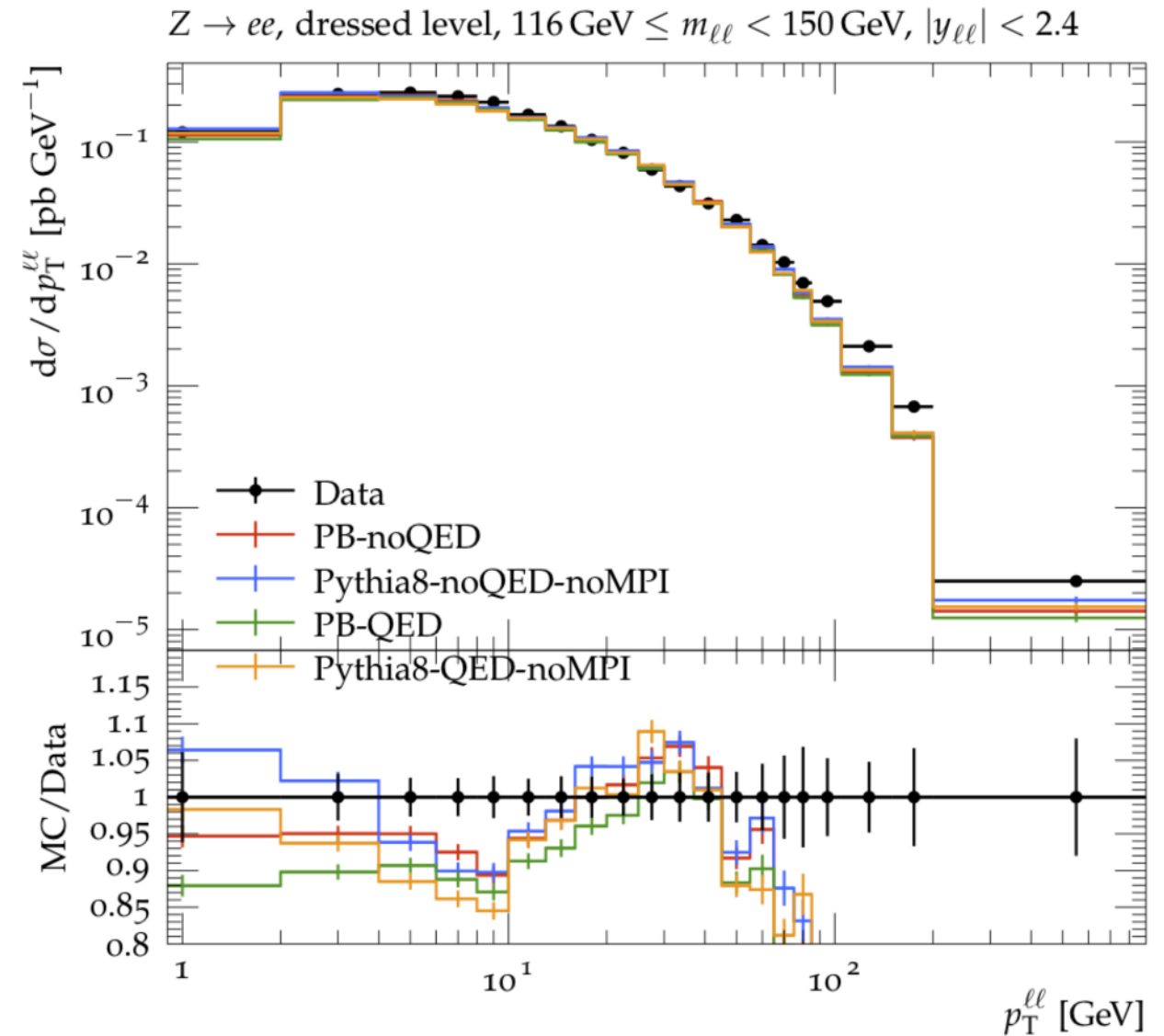
QED radiation from lepton pairs in CASCADE & P8

- DY at NLO (from aMCatNLO)
 - PB TMDs
 - P8 shower
- Z mass



QED radiation from lepton pairs in CASCADE & P8

- DY at NLO (from aMCatNLO)
 - PB TMDs
 - P8 shower
- large DY mass



LHCEW yellow report this year

- LHCEW WG is planning a midterm yellow report:
 - important: benchmark comparisons
 - PB results for jets, Z+jets, W+jets ?
 - can we start a task force to produce benchmark comparisons ?
 - other contributions ?
 - include determination of intrinsic k_t

AOB

- Inspire and BibDesk
 - new Inspire no longer works with BibDesk: need to ask for fix ?
- Setting up Ticketing for TMDlib and CASCADE:
 - CASCADE: <https://gitlab.cern.ch/jung/cascade/-/issues>
 - please try it ... for the moment it is just a test :)

Agenda

PB TMD discussion

Thursday, 7 May 2020 from **15:30** to **17:30** (Europe/Berlin)
at **CMS meeting room**

Manage ▾

Description Join Zoom Meeting
<https://cern.zoom.us/j/7861953672>

Meeting ID: 786 195 3672
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+41432107042,,7861953672# Switzerland

Dial by your location
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Meeting ID: 786 195 3672
Find your local number: <https://cern.zoom.us/u/abpX0tBv9e>

Thursday, 7 May 2020

15:30 - 15:50	Intro 20'	▾
15:50 - 16:10	News on TMD distributions from Pavia group 20'	▾
	Speaker: Chiara Bissoletti	

Next workshops

- ICHEP 2020 30 July – 5 August Prague (is now video only)
 - Jet production at NLO in the Parton Branching method at LHC energies
A. Bermudez, F. Hautmann

My abstracts

3 / 3  Enter #id or search string 

616. TMD densities at leading and higher order from the Parton Branching method

 Sara Taheri Monfared (Deutsches Elektrone...)

 Last modified: 21 Feb 2020

Submitted

We present a new determination of Transverse Momentum Dependent (TMD) parton distributions obtained with the Parton Branching (PB) method at LO, NLO and NNLO. The PB TMDs are extracted from fits to precision DIS data using

800. Drell-Yan production at NLO in the Parton Branching method at low and high DY masses and low and high \sqrt{s}

 Qun Wang (Peking University (CN))

 Last modified: 25 Feb 2020

Submitted

Transverse Momentum Dependent (TMD) parton distributions obtained from the Parton Branching (PB) method are combined with next-to-leading-order (NLO) calculations of Drell-Yan (DY) production. We apply the MC@NLO method for

857. Parton Branching method and applications to pp and ep processes

 Jindrich Lidrych (Deutsches Elektrone...)

 Last modified: 26 Feb 2020

Submitted

Transverse Momentum Dependent (TMD) parton distributions obtained within the Parton Branching (PB) approach offer a wide spectrum of applications to describe processes in nn as well as in ep interactions. We give an overview of the PB

News

- CASCADE 3.0.2-beta02 released:
 - `/afs/desy.de/user/j/jung/scratch-dust/cvs/cascade3/cascade-3.0.2-beta02.tar.gz`
- next release:
 - allow for multiple weights → to be used in Rivet3 for scales (and perhaps for TMD)
- further CASCADE strategy:
 - need to rewrite CASCADE for modern language
 - either: separate CASCADE with links to pythia (strategy as is now)
 - standalone making use of tools from Pythia
 - or: CASCADE as plugin to pythia
 - included in Pythia, just as a switch

PB strategies

- Need a repository for predictions and comparisons
 - PBplots (similar to MCplots)
 - allow to plot any distribution, compare to data, but also to std MCs
 - [link](#) to some PB plots
- Prepare for a systematic comparison of PB pred with data (Armandos idea)
 - prepare for a legacy paper ?
- PB comparisons
 - inclusive DY at LHC
 - inclusive DY at low \sqrt{s} and low m_{DY}
 - Z+jets, W+jets
 - Z+bjets
 - inclusive jets
 - inclusive b-jets
 - di-jet correlations
 - etc ?