

Photon and jet measurements at the LHC : Possible items for discussion

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Some open points

Large variety of measurements, several comparisons with theoretical predictions, overall good agreement : some possible points for discussion:

- Errors on the measured alpha is smaller from CMS measurement. The observables are not exactly the same
 - R32 for CMS (fit as a function of pt_{ave}), N32 in ATLAS (fit as a function of jet_{pt})
- Dijet with rapidity gaps : any hint of BFLK dynamics ?
- Different predictions in the photon-jet ΔY between Madgraph and Sherpa
- Good agreement for photon cross sections with NLO/NNLO predictions
 - Overall good agreement with Sherpa. Fair agreement with Pythia/Herwig when including radiation photons

Role and aims of jet and photon measurements

- Which is the aim of measurements involving jets and photons in the Higgs era ?
 - Inputs to PDF, reduce uncertainties
 - Input for MC tuning
 - Backgrounds for physics processes
 - 'Service' measurements ?
- Rather limited manpower : which measurements deserve more attention ? Which observables should we (better) look ? What future for QCD photon/jets measurements in 2015 ?
 - Reduce uncertainties on the existing measurements ?
 - Address new (interesting) measurements (photon + b/c jets, diphoton+2jets ...) ?