

# Discussion topics

- How to look for/understand coherence effects?
  - large angle splittings are independent (as expected)
  - How about subjet correlations?
  - How does grooming impact our conclusions?
  - Why are observed modifications so small? Shouldn't coherent energy loss have visible impact?
- Why is groomed jet mass unmodified?
  - Is the real action in the soft stuff groomed away?
- Are fluctuations & background problems for jet pull?
- Why no broadening in  $\gamma$ -jet  $\Delta\phi$  correlation? Is the real action at a softer scale?
- Do we have any experimental evidence for different energy loss for q and g jets? Absence or no evidence?

- Do we have any experimental evidence for different energy loss for  $q$  and  $g$  jets? Absence or no evidence?
  - Yes, but it is not pronounced, by looking at  $pTD$ , for instance
  - Did we see the difference between gamma-jet and di-jet measurements? Slightly differences observed at the core of the jets, but broadening more domain
  - Need to know fraction of  $g/q$  first, model dependent
  - Dijet? In a given range more  $g$  jet favored?
  - It's trival to separate  $q/g$ , only at LO, at next leading order it is quite different to trace back to  $q/g$

# Why no delta-phi broadening

- Down to low pt jets, 10 GeV scale?
- Going to forward range?
- Why is groomed jet mass unmodified?
  - There is modification, but small