

Subprocess fractions with π^\pm tagging

Spin&cold QCD weekly meeting

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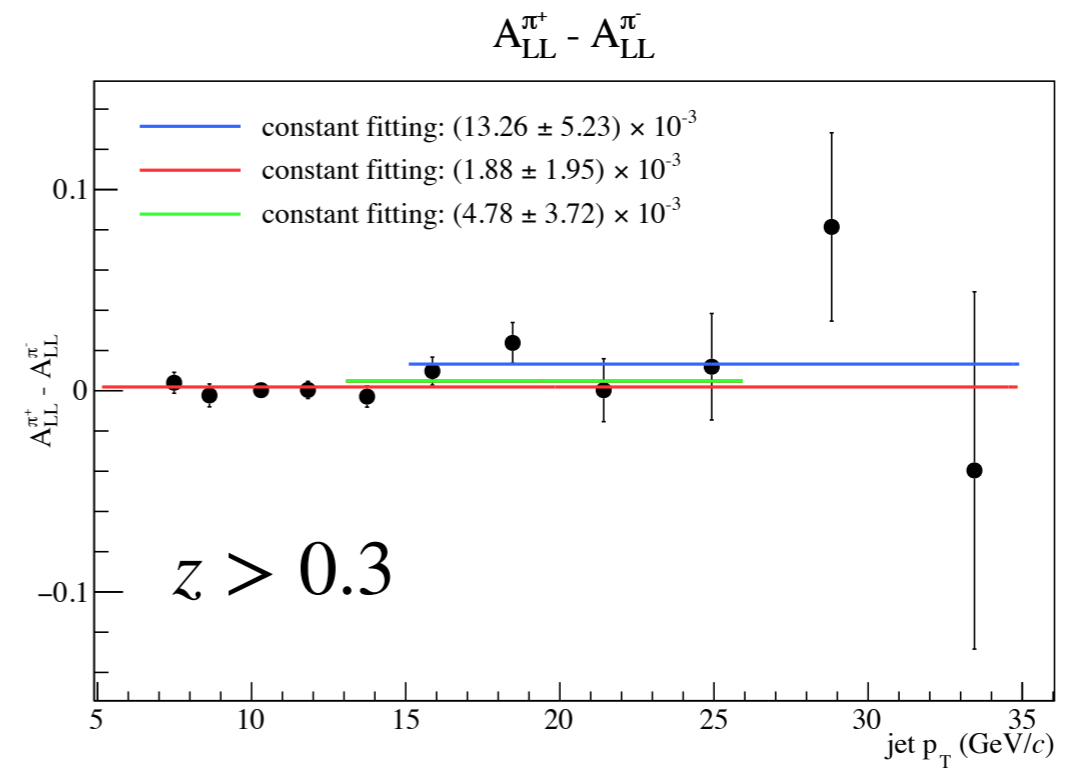
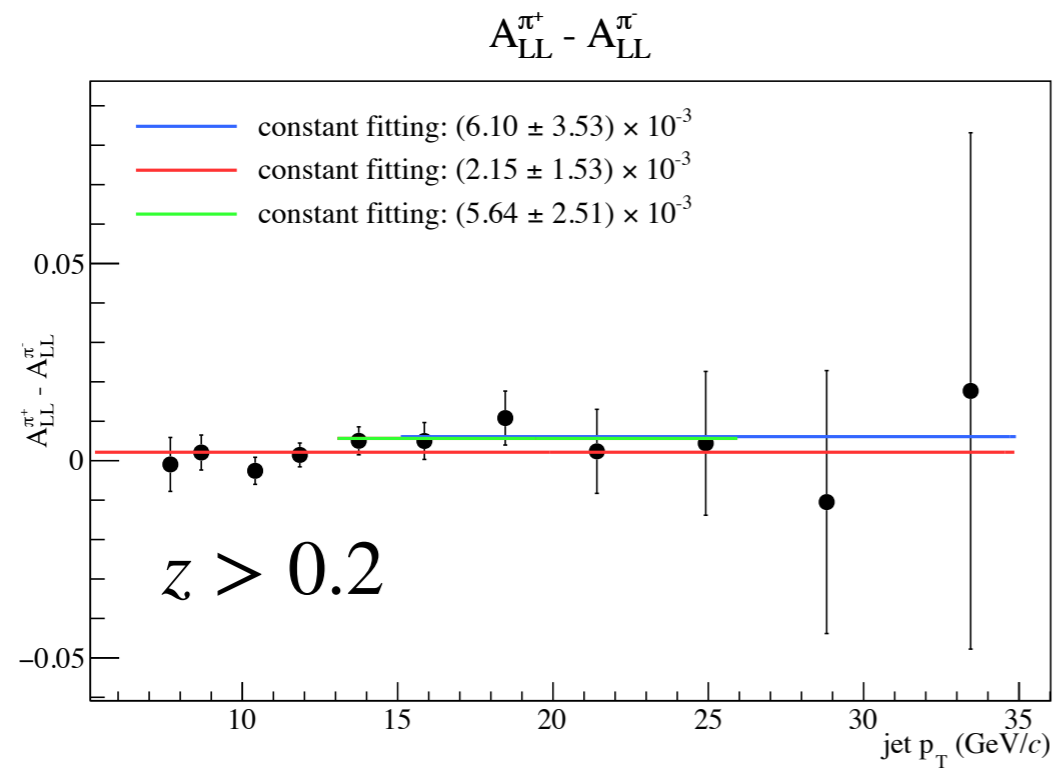




Updates

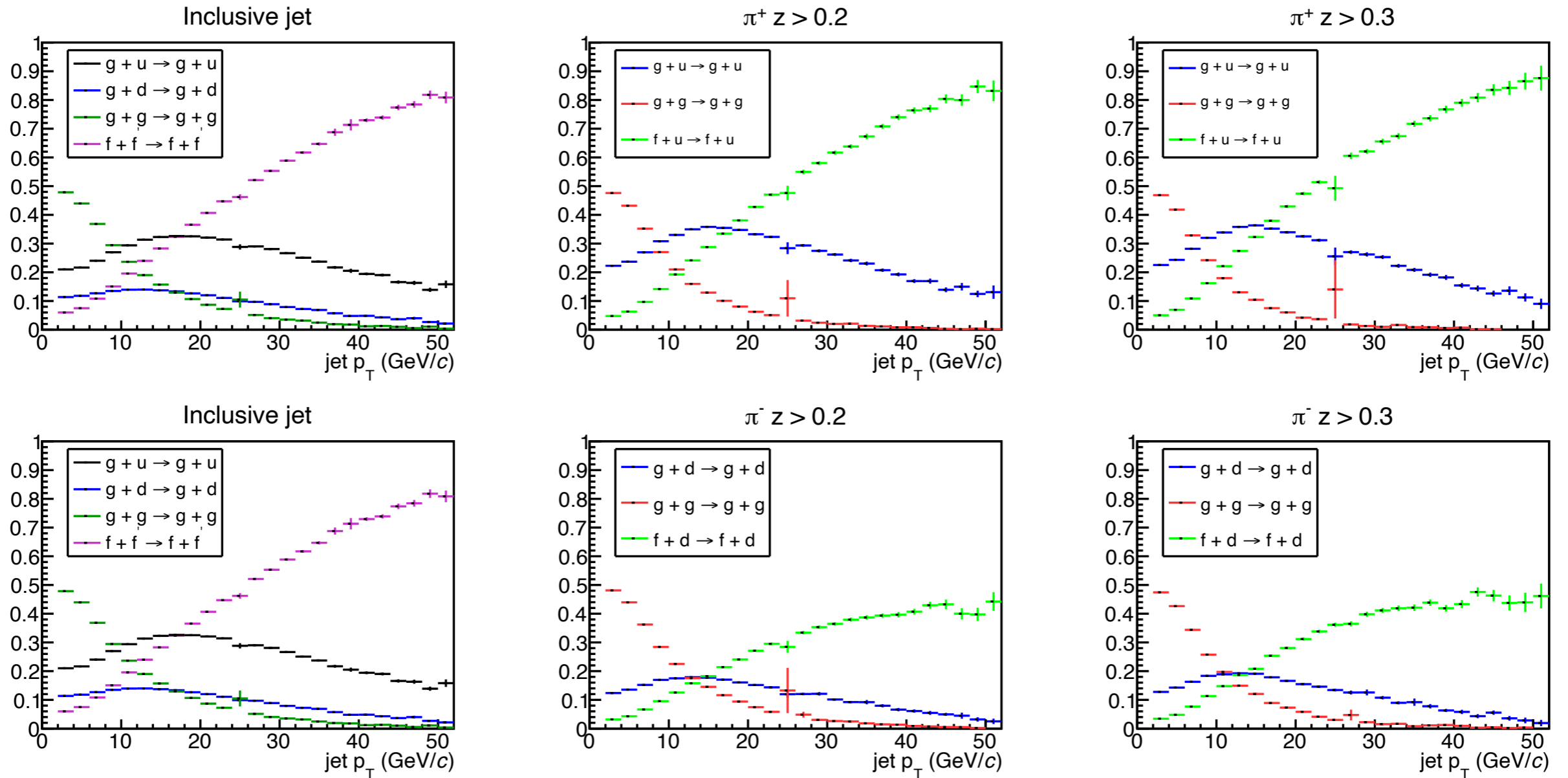
- Check the difference between $A_{LL}^{\pi^+}$ and $A_{LL}^{\pi^-}$.
- The impact of pion tagging to relative subprocess fraction comparing to inclusive results.

Differences between $A_{LL}^{\pi^+}$ and $A_{LL}^{\pi^-}$



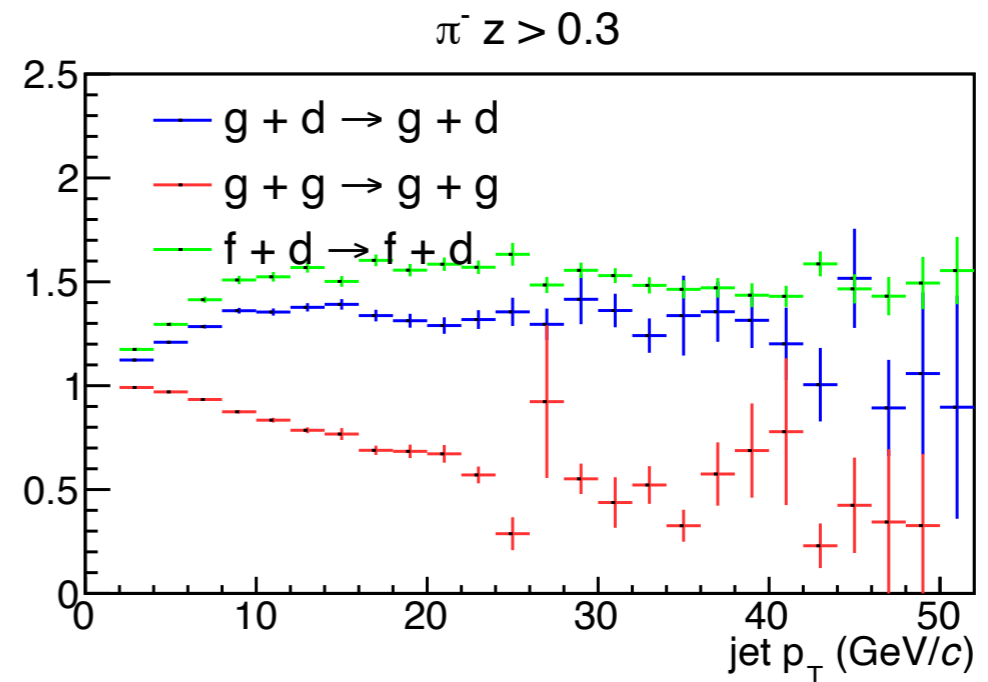
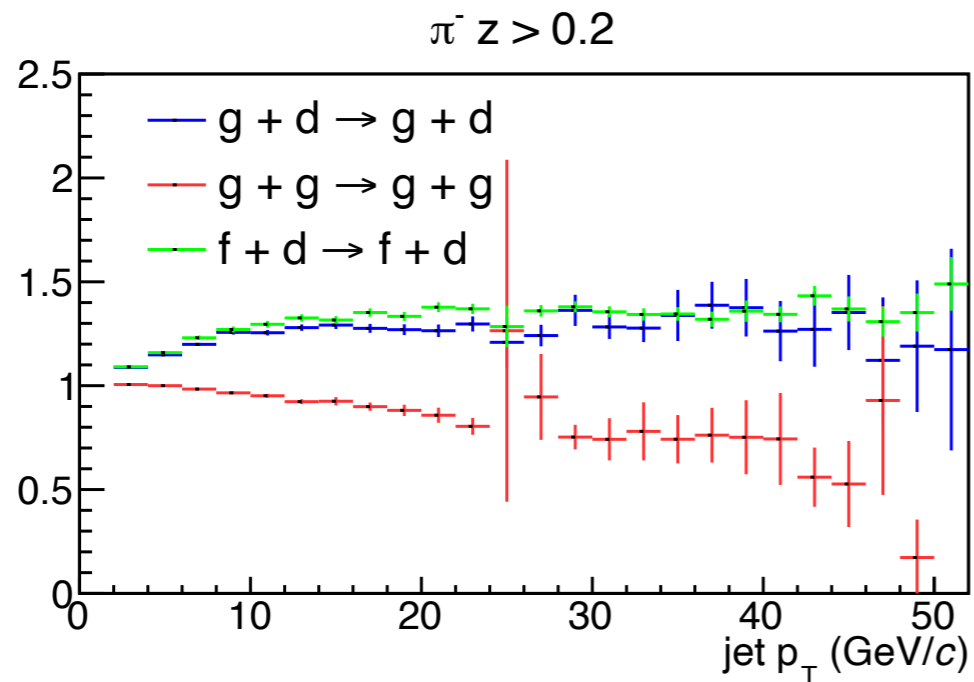
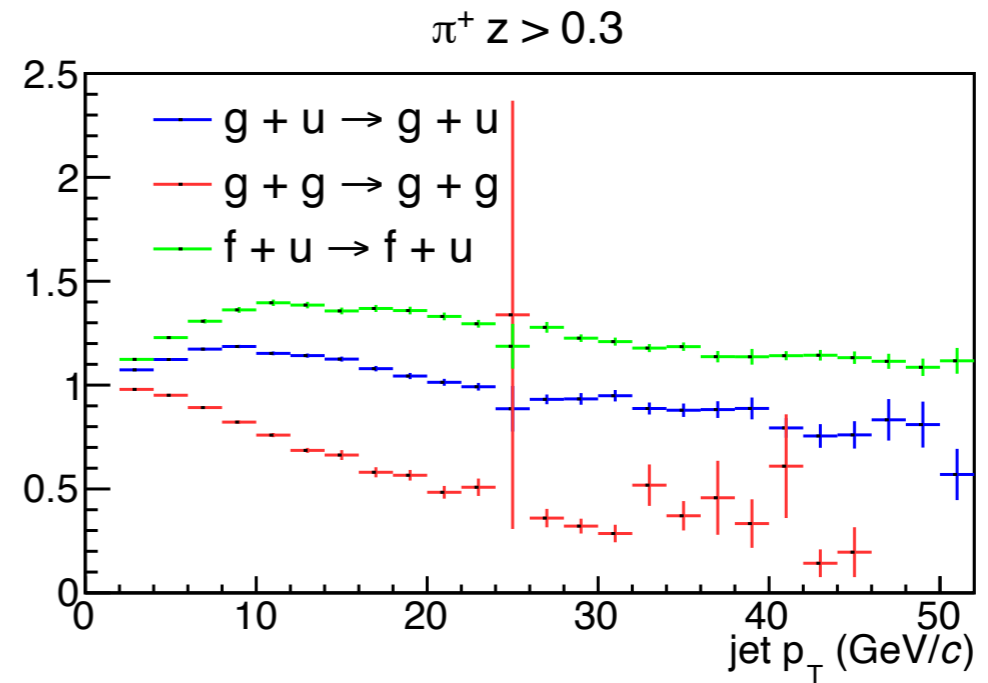
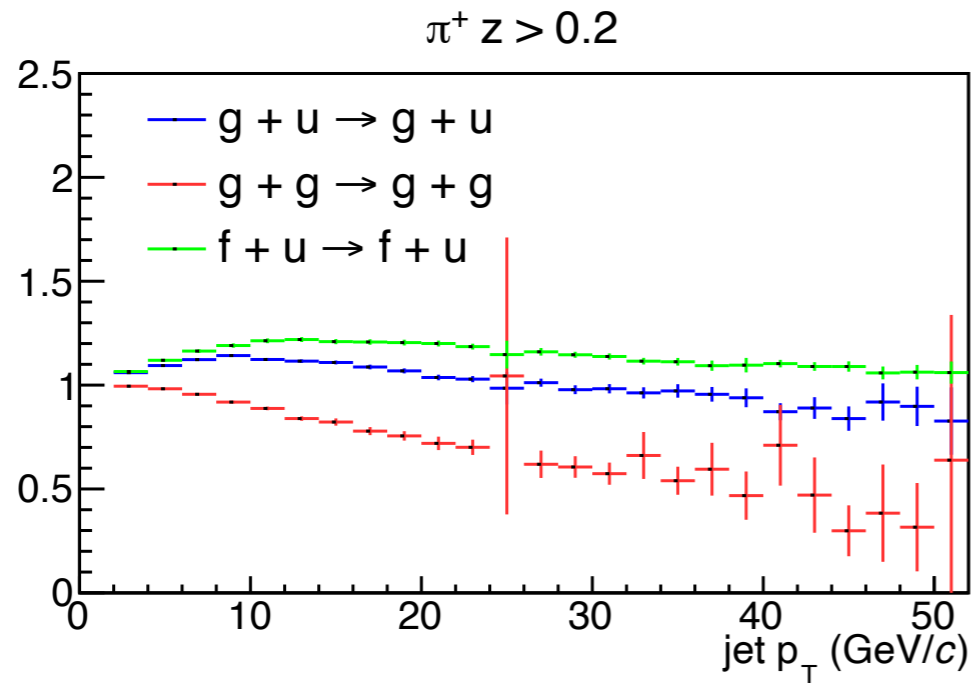
- Largest sigma are 2.2 for $z > 0.2$ and 2.5 for $z > 0.3$

Subprocess fraction



- Calculated with run15 official embedding.

Ratios to inclusive results





Conclusions

- Impacts of π^+ tagging
 - ▶ Slightly enhancement to g-u scattering
 - ▶ Enhancement to f-u scattering
 - ▶ Suppression to g-g scattering.
- Impacts of π^- tagging
 - ▶ Enhancement to g-d, f-d scattering.
 - ▶ Suppression to g-g scattering.
- Raising z_{min} from 0.2 to 0.3
 - ▶ In general, it strengthens the enhancements or suppressions.

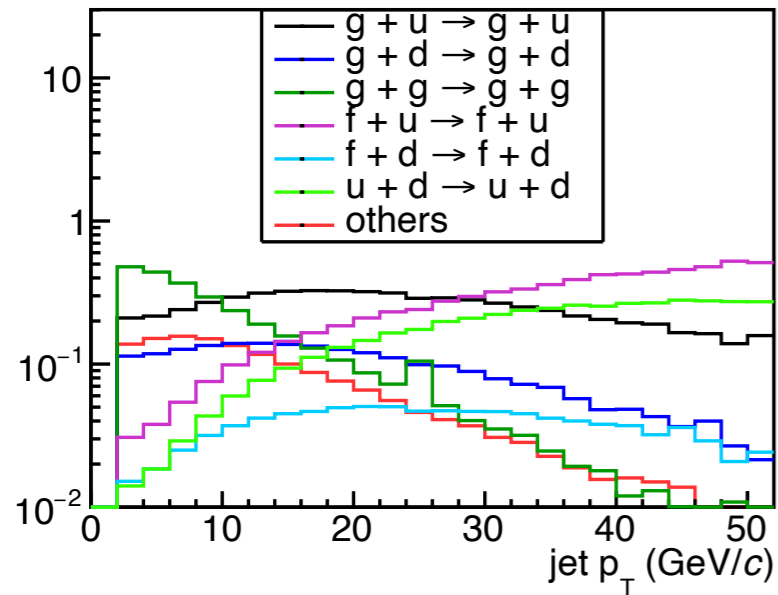


Backup

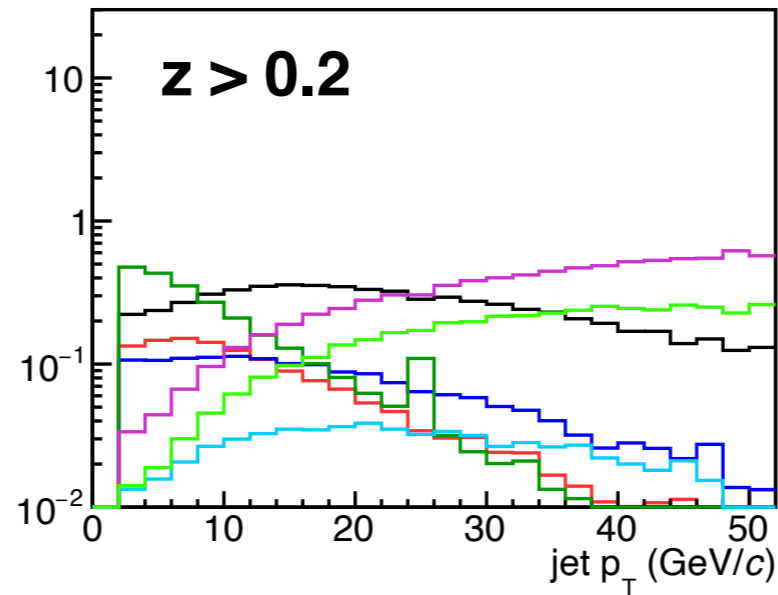
Subprocess fraction



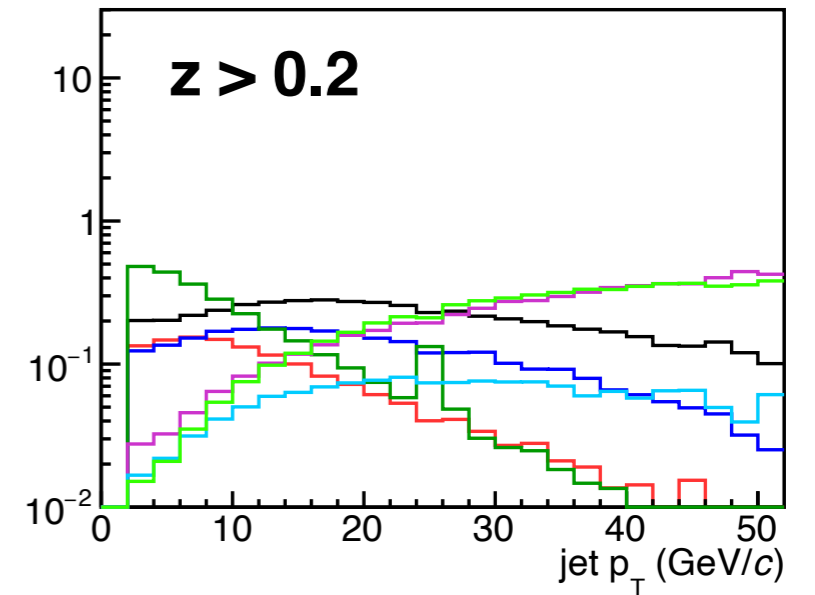
subprocess fraction of inclusive jet



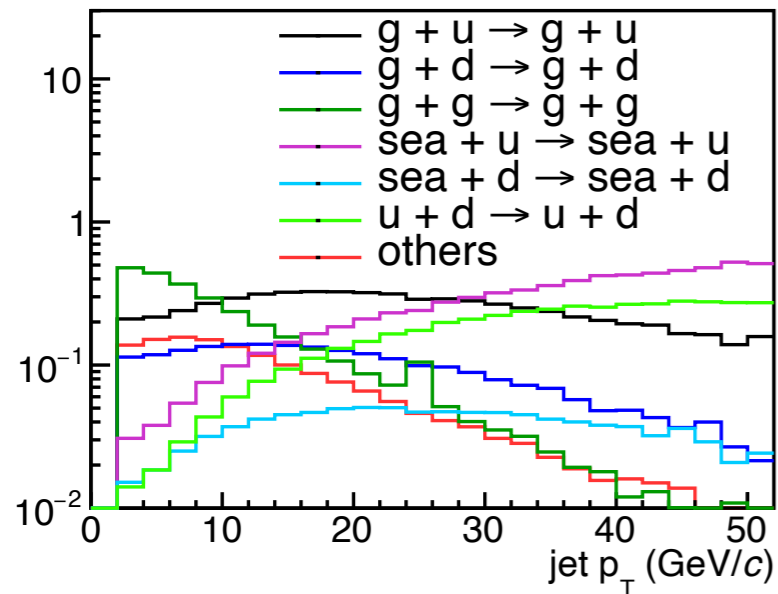
subprocess fraction of π^+ -tagged jet



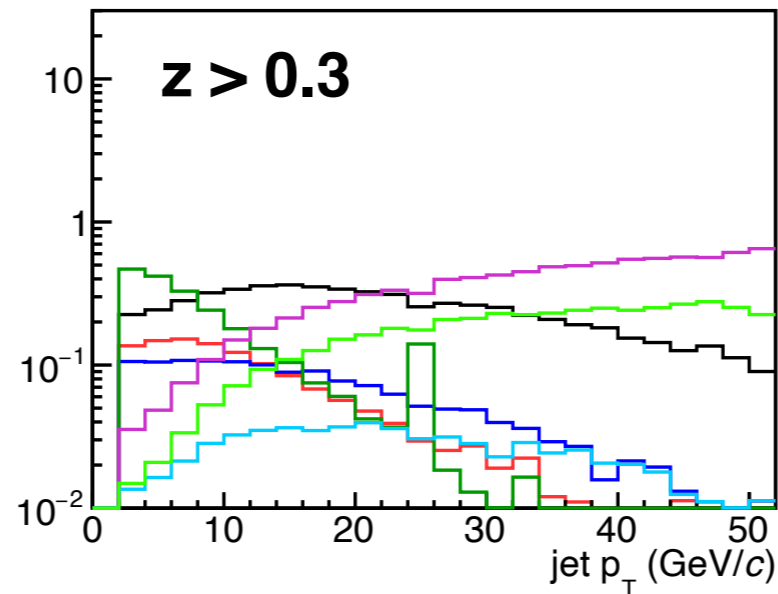
subprocess fraction of π^- -tagged jet



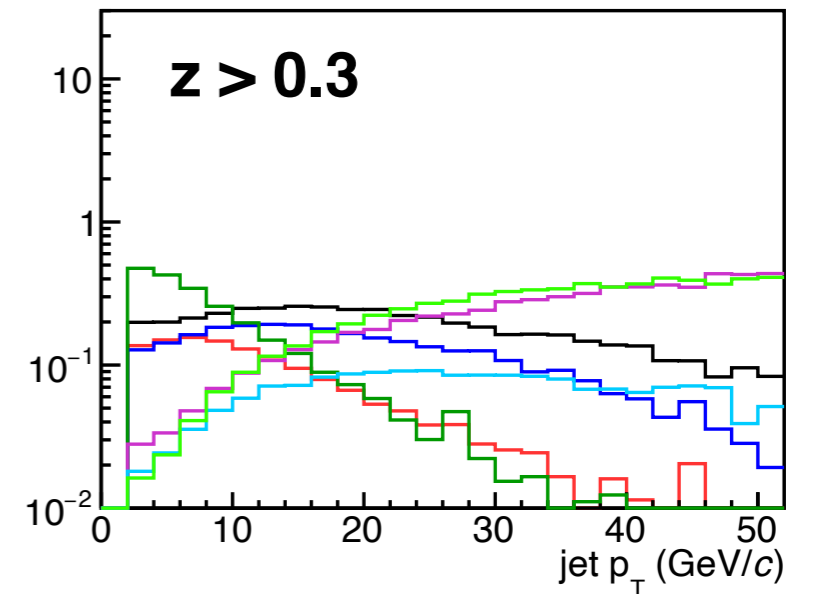
subprocess fraction of inclusive jet



subprocess fraction of π^+ -tagged jet



subprocess fraction of π^- -tagged jet



Ratios to inclusive results

