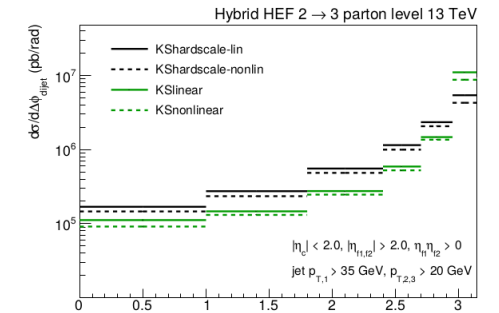


# Plans for potential contributions to SNOWMASS 2020-2021

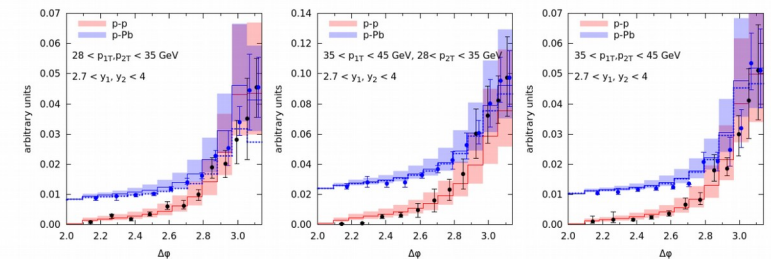
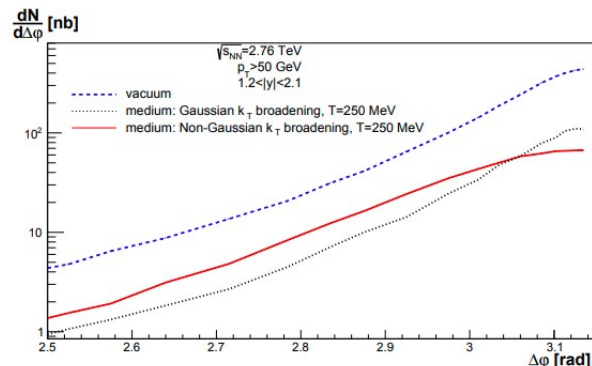
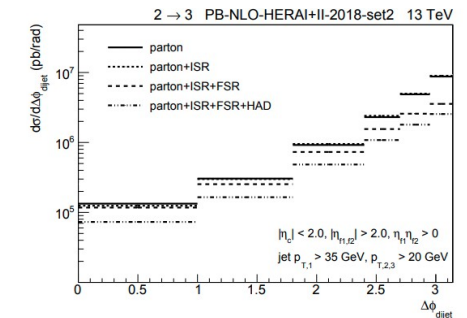
Krzysztof Kutak IFJ PAN

- **Tri-jets** trijets in forward rapidity region
  - trijets have great potential for studies of unintegrated parton densities and parton showers
  - Applications of small- $x$  Improved Transverse Momentum Dependent factorization (ITMD) to tri-jets + Sudakov effects
- Further work on **dijets** in ITMD. More detailed comparison to data
- Jets at **EIC – saturation physics**
- New results for **unintegrated quark and gluon densities** along the method proposed in by Gituliar, Hentschinski, KK JHEP 01 (2016) 181
- Further studies of non-Gaussian broadening in **A-A collisions and initial state effects**



2004.07551

Van Haeevermaet, Van Hameren, Van Hameren, Kotko, KK



Phys.Lett.B 795 (2019) 511-515, Van Hameren, Kotko, KK, Sapeta