

# SIDIS working group

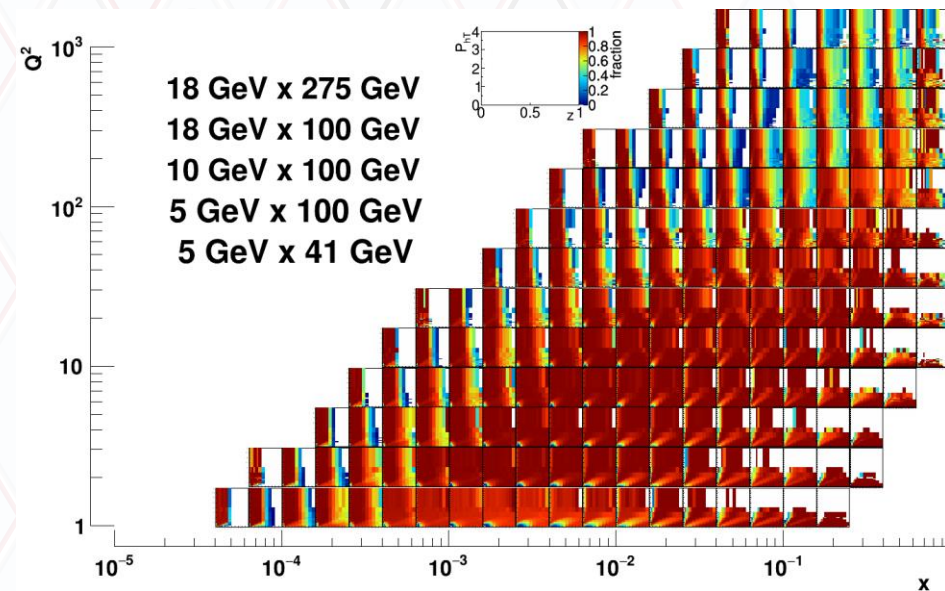
**ECCE physics conveners meeting  
April 20**

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Ralf Seidl (RIKEN)**

# Main figures for the report

- 4D ( $x$ - $Q^2$ - $P_{hT}$ - $z$ ) kinematical + PID coverage figure similar to YR
  - Concentrate for the most part on certain  $x$ - $Q^2$  ranges due to simulation cost
- Closely related:  $z$ ,  $P_{hT}$  and  $\phi_s$ ,  $\phi_h$  smearing figure for different ECCE configurations
- Simulations can start from the YR Pythiaerhic/eic-smear files

Fig. 8.29



# Sivers/Collins/unpol TMD figures

- Redo these YR analyses (AUTs require reweighting of events in truth kinematics+parton flavor)
- Need to take into account crossing angle and related acceptance/smearing effects
- Similar to YR guess systematics via variation between perfect and smeared options
- Extrapolate from some x-Q2 bins to all and give to Alexey Vladimirov (Sivers, unpol TMD) or Daniel Pitonyak (Tensor charge) for impact studies

Fig. 7.53: Sivers

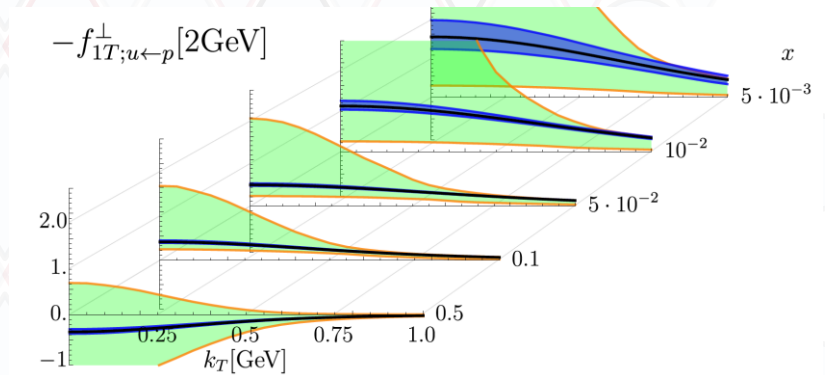
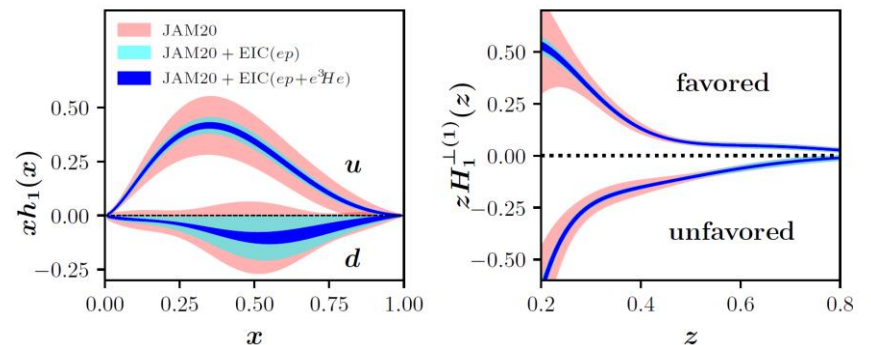


Fig. 7.54: Transversity



# Some spectroscopy along X/Y/Z states

- Spectroscopy could be interesting as mostly photoproduction at forward rapidities

Fig. 8.38

