Discussion: Physics program for backward angle scattering II

Backward angle scattering workshop, 21-23 Sep 2020

JLab12 backward scattering experiments

 $ep \ \mathsf{CLAS12} \ \pi^0, \phi, \ \mathsf{other} \ \mathsf{channels}, \ \sigma?; \ ed \to pn \ \leftarrow \ \mathsf{yesterday} \ ep \ \mathsf{Hall} \ \mathsf{C} \ \pi^0, \eta; \omega, \rho, \phi, \ \mathsf{other} \ \mathsf{channels} \ \sigma? \ \leftarrow \ \mathsf{yesterday}$

 γp Hall A backward TCS $\ \leftarrow$ TODAY

 γp Hall C Compton \leftarrow TODAY

 $\gamma p \text{ Hall D } \omega, K\Sigma, B\bar{B} \leftarrow \text{today}$

- What is needed for planning, simulations, analysis?
- What are the priorities for channels and kinematics?

Theory and interpretation ←

Hard dynamics: QCD factorization, TDAs Soft dynamics: Hadronic/Regge models

• What developments are needed, possible?

High-energy backward scattering at EIC and UPCs ←

New opportunities: Broad kinematic range, other channels?

- What simulations and modeling are needed?
- What detection is needed/possible?

Connections and synergies with hadronic probes ←

 $\bar{p}p$ at PANDA, hadron-p at J-PARC

How to integrate them in common physics program?