



SIDIS status

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Roadmap for early science impact studies +NIMA

- nFF (+nPDF):
 - Charlotte and Pia are working on it,
 - March campaign data just arriving now,
 - impact studies should be available by ESR deadline
 - Probably can expect new impact plots made public in physics forum
- Low-x studies:
 - Gabriel Garcia will present his studies next week in PWG meeting
 - So far on generator level, will see if the study can be repeated on the simulation campaign, if so will require to make new plots public
 - Early science will not enable discovery of saturation, but set the baseline (will adjust the wording accordingly)

Roadmap continued

- Unpolarized TMDs:
 - ES Data will be updated by Lorenzo Polizzi and Sara Pucillo
 - Updated impact figures by Pavia group essentially ready, need the new ES data
 - Will make new figures public in physics forum
- Sivers/Collins Asymmetries:
 - Campaign ES data just arriving, framework established
 - Alexey Vladimirov(Sivers) and Daniel Pitonyak/JAM (Transversity+Collins) to produce updated ES impact figures
 - Some attempts to get polarized structure functions+uncertainties from phenomenologists to show impact already on asymmetry level
 - New ES figures will need to be made public

Roadmap continued

- A_{1p}
 - Charlotte has framework ready, work on data as it becomes available
 - Getting impact plots from phenomenologists might be difficult as main person currently on paternity leave –maybe possibility to show uncertainties on the expected asymmetries instead?
 - Will need new plots to be made public
- A_{1n} /spectator tagging:
 - So far no active work on tagging in our group, maybe concentrate on impact of $A_{1D/3He}$ in studies above?

Roadmap continued

- Gluon Sivers?
 - Currently not in ESR but could be very useful, Charlotte's student Javier Jimenez-Lopez is working di-hadron case, little progress on D meson case by Artur
 - Will only get update on studies in May due to classes
 - Would need to make figures public
- Lambda studies:
 - Currently no active analysis work ongoing, so little chance of getting any impact figures for ESR

General aspects of ESR

- We will update the text in the ESR appendix according to the suggestions we received by the reviewers and the discussions at the early science workshop, mainly:
 - Add table of planned measurements to each section
 - Discuss the state-of-the-art/expected knowledge at the time of the early science report
 - Balance the different sections better in terms of discussions and wording
- Should we also touch the main part SIDIS section?

