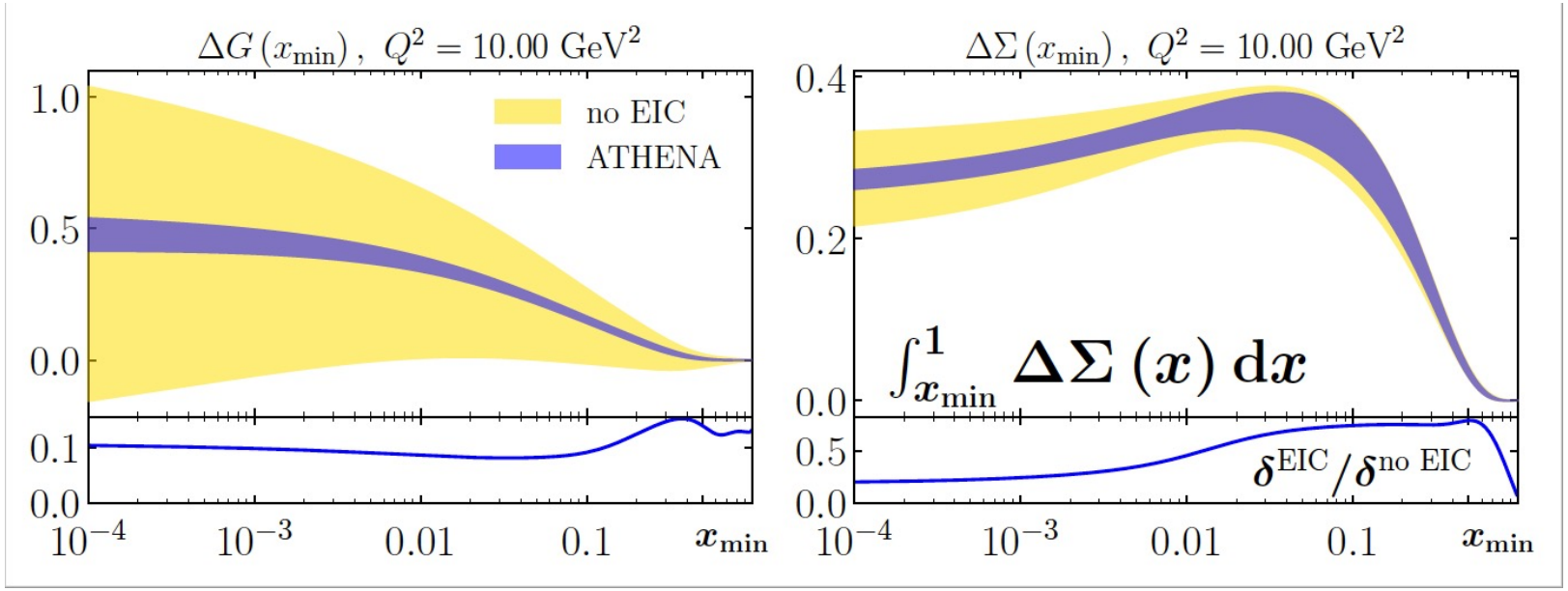
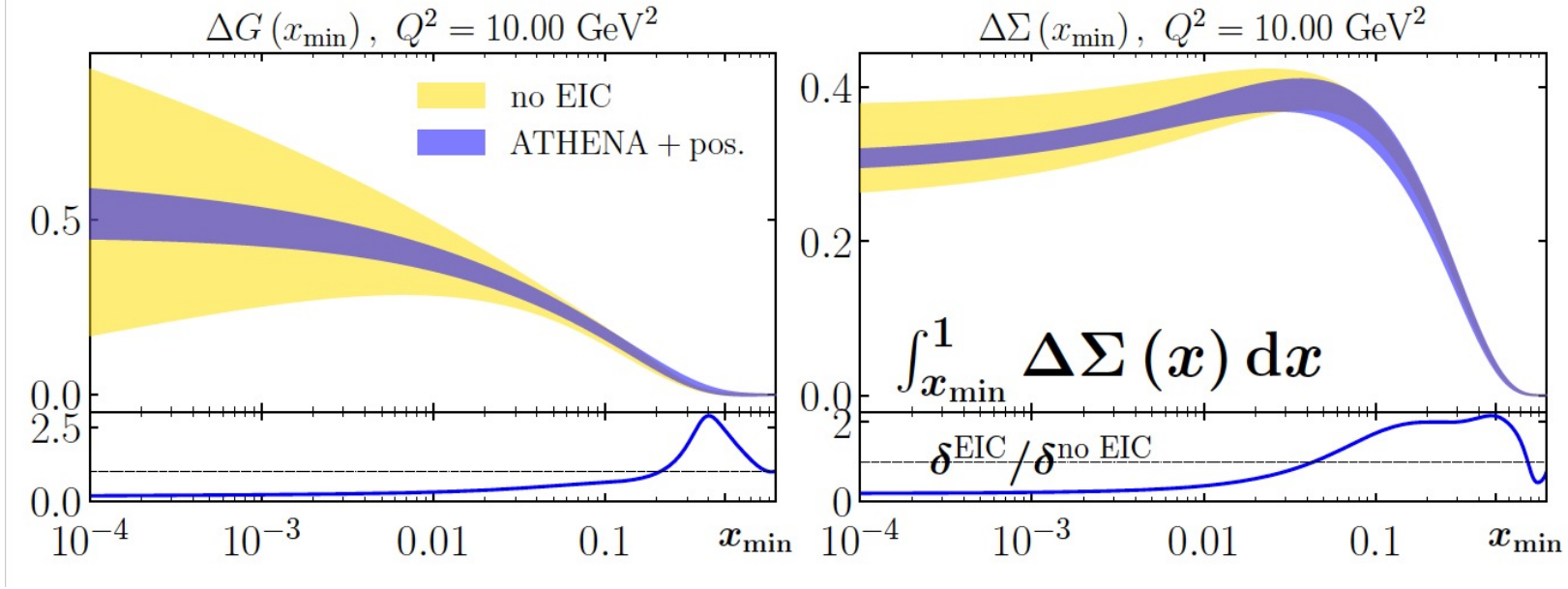
-Impact plots on pol. PDFs from JAM:



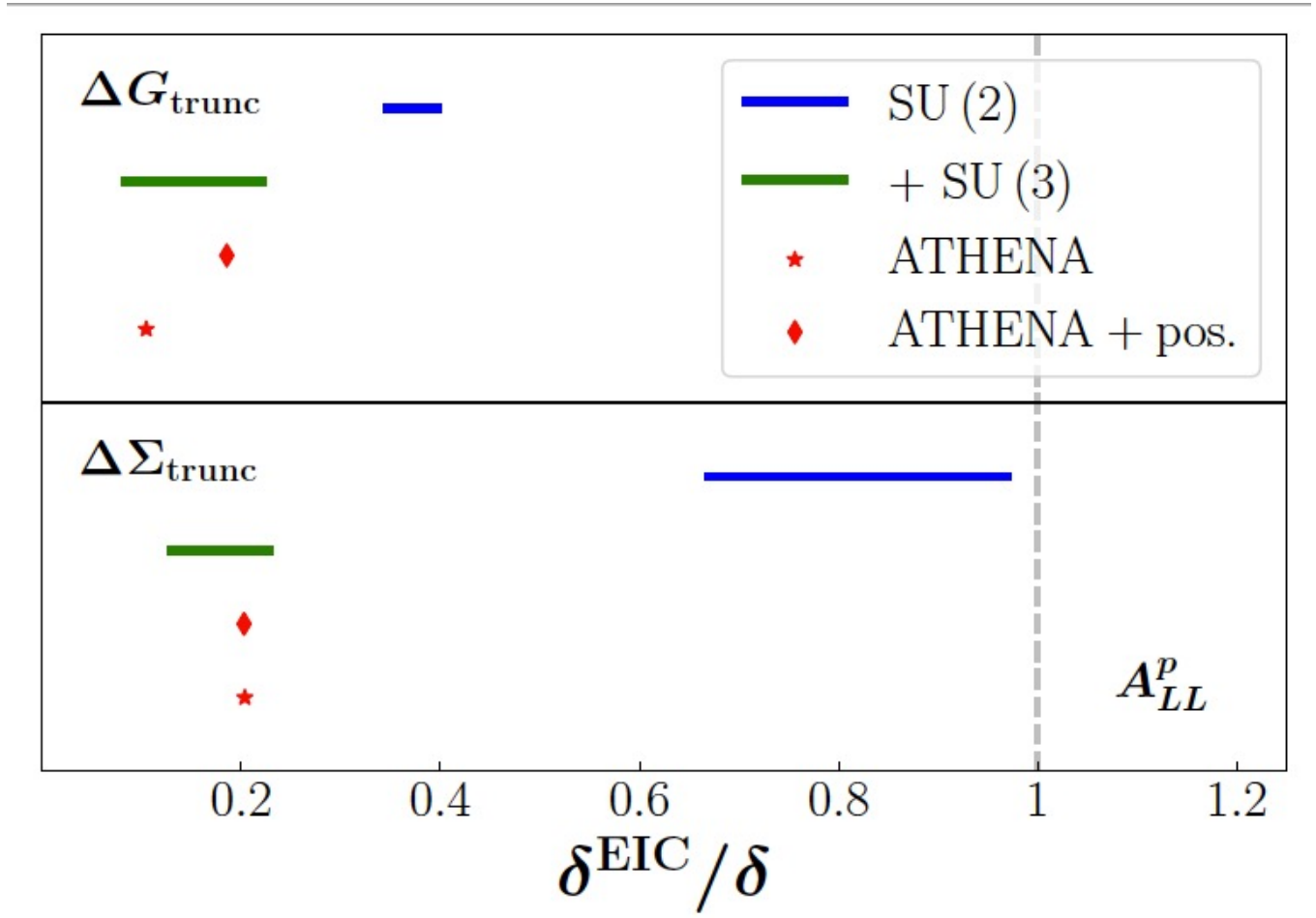


- Impact of ATHENA pseudo-data on gluon and quark helicity distributions from JAM collaboration (Yiyu Zhou, Nobuo Sato et al.)
- Pseudo-data prepared by Barak, which contain 5 beam energies with projected luminosities based similar running time.

18X275	15.4 pb^{-1}
10X275	100 pb^{-1}
10X100	79 pb^{-1}
5X100	61 pb^{-1}
5X41	4.4 pb^{-1}

Note: at low $x<10^{\wedge-4}$, the pseudo-data uncertainty is dominated by a systematic one from relative luminosity between beam spin states.

- With one impact plot by JAM with relative uncertainty truncated moments for **ΔG**, **ΔΣ** after including ATHENA pseudo-data



Note: Baseline without EIC includes RHIC jet A_{LL} data in pp, that is why a large relative uncertainty with "+pos." ?

- Impact of ATHENA pseudo-data on gluon and quark helicity distributions from JAM collaboration (Yiyu Zhou, Nobuo Sato et al.)

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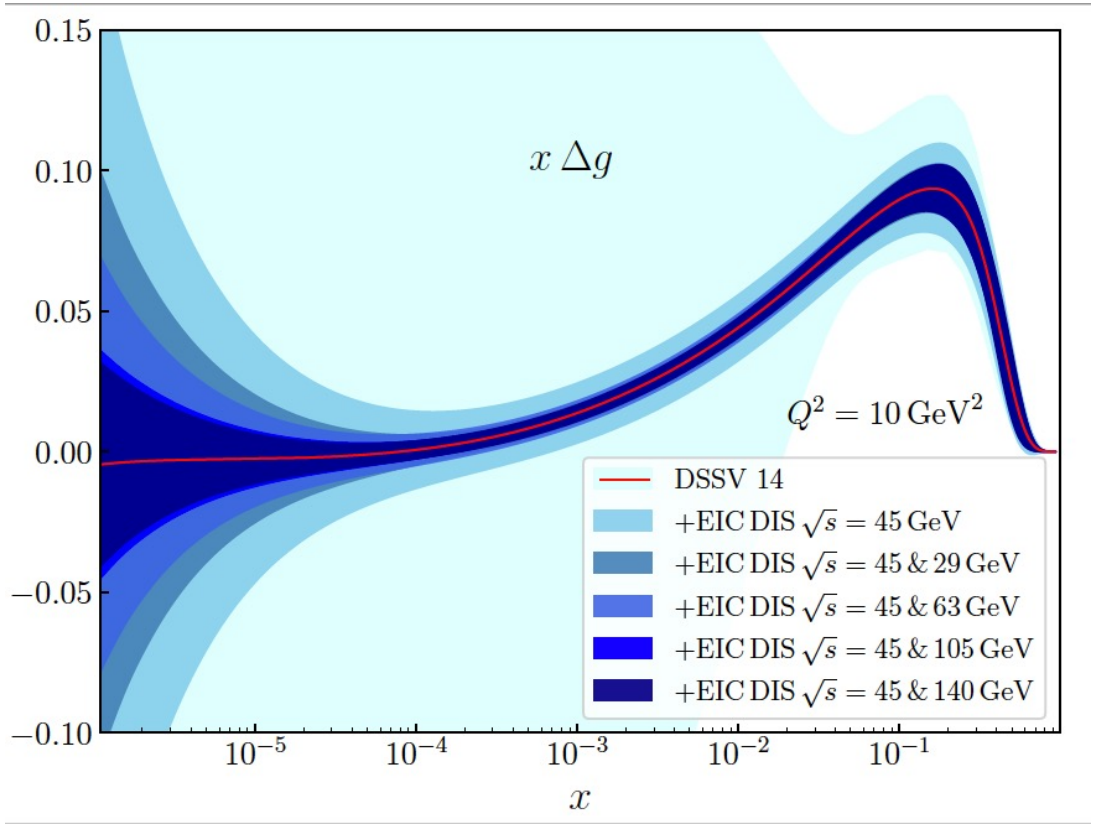
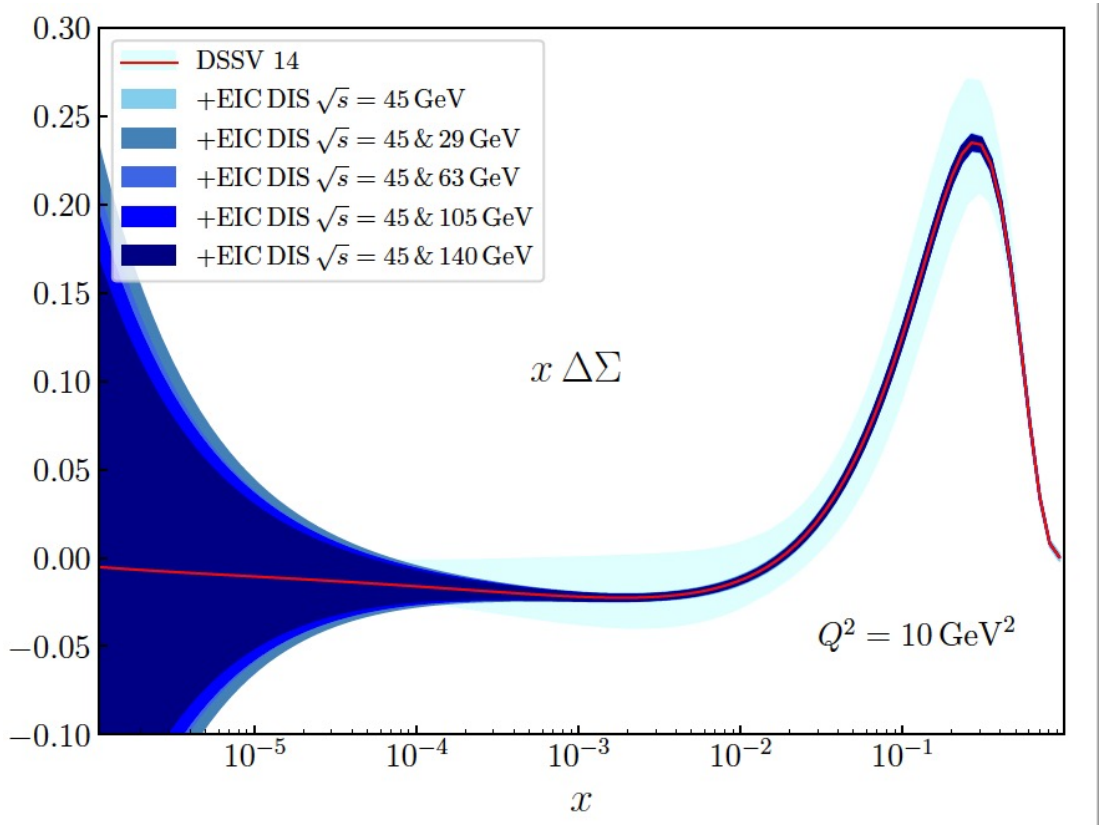
Note: at low $x<10^{\wedge-4}$, the pseudo-data uncertainty is dominated by a systematic one from relative luminosity between beam spin states.

-Impact plots on pol. PDFs from DSSV:





- Pseudo-data contain 5 beam energies with projected luminosities based similar running time.

18X275	140,	15.4 pb^{-1}
10X275	105,	100 pb^{-1}
10X100	63,	79 pb^{-1}
5X100	45,	61 pb^{-1}
5X41	29,	4.4 pb^{-1}

- Baseline is DSSV14, +45GeV is the same as in YR

  Note: at low x<10^-4 , the pseudo-data uncertainty is dominated by a systematic one from relative luminosity between beam spin states.