

Discussion: Relationship between gluons and sea quarks

- What can be learned about gluons from sea quark distributions, and vice-versa, for
 - unpolarized, collinear PDFs?
 - helicity PDFs?
 - transversity PDFs and linearly polarized gluons?
 - TMD PDFs?
- Perturbative vs. nonperturbative interplay between sea quarks and gluons?
 - Do the nonperturbative mechanisms that must be generating the flavor asymmetry observed in the unpolarized, collinear sea affect gluon distributions at all?
 - In the low- x regime, is the relationship between gluons and sea quarks straightforward?
- What role does Q^2 evolution play in the relationship?
 - Is this role exactly the same for DGLAP vs. CSS evolution, i.e. are collinear and TMD PDFs affected differently?
 - What about evolution of the transversity distributions?