

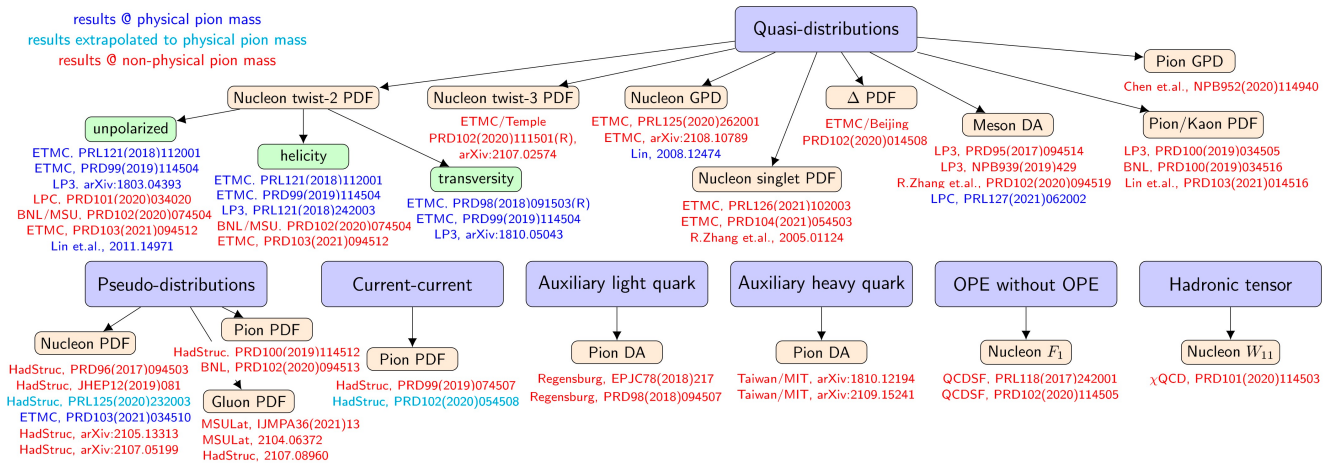
# Lattice QCD updates on TMDs and GPDs

## Presentations

1. 03 Feb 2021 [LQCD\\_updates\\_02\\_03\\_2020.pdf](#)
2. 28 Apr 2021 [LQCD\\_updates\\_04\\_28\\_2021.pdf](#)

## A Summary (in 2021)

<https://arxiv.org/pdf/2111.04552.pdf>



## References

1. Parton distributions and lattice QCD calculations: toward 3D structure [<https://arxiv.org/abs/2006.08636>] (2020)
2. The x-dependence of hadronic parton distributions: A review on the progress of lattice QCD [<https://arxiv.org/abs/2010.02445>] (2020)
3. Complete flavor decomposition of the spin and momentum fraction of the proton using lattice QCD simulations at physical pion mass [<https://arxiv.org/abs/2003.08486>] (2020)
4. Overview of lattice calculations of the x-dependence of PDFs, GPDs and TMDs [<https://arxiv.org/abs/2111.04552>] (2021)

I think it's a good idea we try to keep this effort moving along, even if only very slowly. We need to compile all the most relevant LQCD papers. By relevant I mean the deduce or predict something about spin, dynamics, charge distribution, and other advancements in lattice that make important conclusions. Like this one, which seems to indicate that the FNAL g-2 experimental results still live within the Standard Model:

<https://arxiv.org/abs/2002.12347>