EIC opportunities for Snowmass



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Gluon saturation and spin physics: a window into axion-like dynamics

We discuss a novel effective action that captures the interplay of hadron spin and gluon saturation in the Regge limit of QCD. In particular, we discuss an emergent axion like dynamics that is mediated by sphaleron transitions. This indicates a window in the strong interactions with formal connections to axion dynamics in dark matter and radiation, and to the role of sphaleron dynamics in B+L violation in the early universe.

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