Studies of parton propagation and hadron formation in the space-time domain

Will Brooks Santa Maria University Valparaiso, Chile

Over the past decade, new data from HERMES, Jefferson Lab, Fermilab, and RHIC that connect to parton propagation and hadron formation have become available. Semiinclusive DIS on nuclei, the Drell-Yan reaction, and heavy-ion collisions all bring different kinds of information on parton propagation within a medium, while the most direct information on hadron formation comes from the DIS data. Over the next decade one can hope to begin to understand these data within a unified picture. I will briefly survey the most relevant data and the common elements of the physics picture, then highlight the new Jefferson Lab data, and close with a prospective for the future.