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Studying Hot Many Body QCD

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Abstract content
 (Max 300 words)

The Standard Model provides an exceedingly successful framework for understanding the few-body physics of particles; however, we know that naive particle physics methods often fail to capture the interesting and highly non-trivial properties that emerge when many particles interact simultaneously. QCD is unique among the forces of nature in that it is both non-Abelian and its many body effects are experimentally accessible, at facilities such as the Relativistic Heavy Ion Collider (RHIC) and the Large Hadron Collider (LHC). One may hope to determine these properties by comparing experimental measurements to theoretical predictions of, for instance, the attenuation pattern of high momentum particles created during the early times of these heavy ion collisions. I am excited to report some of the early physics conclusions we may draw from the first two years of data collection from LHC and the decade of dedicated research from RHIC.

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