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## Quantifying a Possibly Reduced Jet-Medium Coupling of the sQGP at the Large Hadron Collider

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Recent LHC data on the nuclear modification factor of jet fragments suggest that the jet-medium coupling at the Large Hadron Collider (LHC) may be reduced relative to the coupling at the Relativistic Hadron Collider (RHIC). We estimate the magnitude of that reduction from a combined fit to the data on the nuclear modification factor and on the elliptic flow at both RHIC and LHC energies over a broad centrality range and a momentum range of 5-100 GeV. We also compare Glauber and Color Glass Condensate initial conditions using a simple analytic energy-loss model that can interpolate between weakly-coupled tomographic and strongly-coupled holographic jet-energy loss models. We find that an approximately 10% reduction of the jet-medium coupling from RHIC to LHC can account for the observed LHC data in reasonable accord with the magnitude expected from a running coupling associated with doubling the density of the strongly-coupled Quark-Gluon Plasma (sQGP) from RHIC to LHC.

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