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## Transverse Momentum Broadening in Weakly Coupled Quark-Gluon Plasma

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Jet quenching parameter or, equivalently, transverse momentum broadening distribution function is an important quantity which helps to understand energy losses in heavy ion collisions and get insights into properties of the de-confined quark-gluon plasma. SCET provides framework to calculate jet quenching parameter at weak coupling using expectation value of two space-like separated light-like Wilson lines which can be evaluated for desired medium. In this work we evaluate transverse momentum broadening distribution function for the quark-gluon plasma in thermal equilibrium using Hard Thermal Loop (HTL) resummed effective thermal field theory and estimate corrections to this approximations.

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