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## Quark Orbital Angular Momentum MATTHIAS BURKARDT, New Mexico State University

Definitions of orbital angular momentum based on Wigner distributions are used as a framework to discuss the connection between the Ji definition of the quark orbital angular momentum and that of Jaffe and Manohar. We find that the difference between these two definitions can be interpreted as the change in the quark orbital angular momentum as it leaves the target in a DIS experiment. The mechanism responsible for that change is similar to the mechanism that causes transverse single-spin asymmetries in semi-inclusive deep-inelastic scattering.