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## Glauber Quarks and Backscattering Resummation in QED

*Monday, 27 March 2023 11:00 (20 minutes)*

Glauber modes associated with fermion exchange lead to large logarithmic enhancements in backward scattering processes in QED and QCD. We discuss the full one-loop matching of backward scattering limit of QCD to SCET augmented with Glauber quark operators, and demonstrate that no one-loop Wilson coefficients are needed, thereby providing an analogous result to earlier work on Glauber gluons. While power-suppressed relative to Glauber gluons, we demonstrate that Glauber quarks have an abelian nature and are responsible for large and novel enhancements in total cross sections in QED.

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