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Production of Two Heavy Quarks With Different Masses at One-loop with Eikonal Approximation[1] ELWIN MARTIN, Georgia Institute of Technology, NIKOLAOS KIDONAKIS, Kennesaw State University — The eikonal approximation provides a powerful tool for calculating hard scattering cross sections in QCD. In particular, we consider the exchange of soft-gluons between quarks in hard scattering. We present the results for the one loop calculation for two quark production with different masses. These calculations begin with the Feynman diagram and use the eikonal approximation for soft-gluon emission. The integration is then Feynman parametrized and the UV poles are isolated. The UV structure also allows us to recover the results for quark-antiquark production.

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