

I thank both referees for taking the time to consider the manuscript and for providing their comments. I've made what I consider significant improvements to the manuscript in order to address the referees' concerns.

Referee 1 commented on the significant amount of review material in the manuscript. As per the referee's suggestion, I reduced the review and cited reference [6]. I kept only the pertinent parts of the review where my notation differs slightly from many practitioners in the field. Also as per the referee's suggestion, I expanded the work related to the important model problem of the hard scattering of a quark by a gluon with the subsequent emission of bremsstrahlung gluons. I clearly articulated that the one gluon emission result is in exact agreement with the literature. I then added new work on the emission of two gluons and showed explicitly that the result is a factor of 2 smaller than necessary in order to lead to a Poisson emission process should one take $C_A \rightarrow 0$. The referee is correct that one should in principle consider loop corrections, but an estimate of loop corrections' quantitative impact on the results presented here is beyond the scope of the work.

Referee 2 comment on some stylistic and grammatical issues. To address the comment that the methods and results were mixed in the manuscript, I created a new Results section. I also corrected the grammatical errors pointed out by Referee 2.