

Photon and dilepton production by a quark-gluon plasma

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Abstract

In this talk, I discuss the present status of the calculation of the photon and dilepton production rates by a quark-gluon plasma, starting with the discussion of well known contributions like bremsstrahlung, and of their phenomenological importance.

Then, I present the results of a study of higher order diagrams, and show that the importance of corrections to bremsstrahlung is controlled by only three characteristic quantities of the problem: the photon formation time, the mean free path of the quarks in the plasma, and the screening length of magnetic interactions.
