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Photon emission rate from Quark-gluon plasma in the presence of finite baryonic density

The photon emission from a finite baryonic Quark-Gluon Plasma is analyzed through annihilation and Compton processes using the Boltzmann distribution function. This analysis incorporates a finite baryonic parameter into the quark mass and coupling constant. Accounting for this parameter enhances the photon production rate compared to earlier theoretical predictions based on this distribution function. The observed improvement in the emission rate suggests the formation of Quark-Gluon Plasma in such baryonic matter.

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