

OBSERVATION OF DIRECT PHOTON AT FINITE QUARK CHEMICAL POTENTIAL FROM HOT AND DENSE MATTER

POONAM JAIN

Department of Physics, Sri Aurobindo College,
University of Delhi, New Delhi- 110017, India

Abstract

We compute the direct photon production of leading order process from quark-gluon plasma (QGP) using phenomenological flow parameter dependent on quark chemical potential in quark mass. The emission rate is observed in the relevant range of transverse momentum. Our model observation of direct photons give the significant contribution in the range $2\gamma_g \leq \gamma_q < 6\gamma_g$. The current analysis of direct photons provides a major role in the formation and evolution of quark-gluon plasma.

Keywords: Quark- Gluon Plasma, Direct Photons

Pacs Numbers: 25.75.Ld, 12.38.Mh, 21.65.+f

© <http://www.ascent-journals.com>