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Title:	Direct photon production in quark gluon plasma
Authors:	<a href="#">Chatterjee, Deya</a>
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Abstract:	Direct Photons are one of the best probes of Quark Gluon Plasma (QGP). The analysis of transverse momenta ( $p_T$ ) spectra of Direct Photons is useful in obtaining the effective temperature ( $T_{eff}$ ) of QGP. The chief production channels of direct photons, thermal and prompt, have very different properties which uniquely contribute to the total direct photon spectra. With the help of simulated data from the Pythia event generator, $p_T$ spectra from each production channel was fitted using Tsallis and Pearson distributions individually and then in a combined way, to obtain the effective temperature of QGP. Comparisons have been made between the $T_{eff}$ obtained from the total direct photon spectra from simulated data and experimental data and an interesting inference has been drawn at the end of this work.
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