Contribution ID: **880** Type: **Poster**

Direct virtual photons production in minimum-bias and high-multiplicity pp collisions at sqrt(s) = 13 TeV at the LHC with ALICE

Tuesday 15 May 2018 19:10 (30 minutes)

Dielectrons produced in ultra-relativistic heavy-ion collisions provide a unique probe of the system evolution as they are unperturbed by final-state interactions. Among the different physics sources of dielectrons, thermal radiation in the form of real and virtual photons is of particular interest as it carries information about the temperature of the hot and dense system created in such collisions.

In heavy-ion collisions, the very low dielectron mass region ($m_{\mathrm{ee}} < 0.3 GeV/c^2$) provides information on the temperature of the system via the measurement of thermal radiation in the form of quasi-real virtual photons.Recently, one has observed collective phenomena in high-multiplicity pp collisions that are similar to the ones observed in heavy-ion collisions. If such collisions produce a thermalised system, it should emit thermal radiation as well.

We present the status for the search of such radiation in high-multiplicity pp collisions together with a vacuum reference measurement in minimum bias pp collisions at $\sqrt{s}$ = 13 TeV.

Content type

Experiment

Collaboration

ALICE

Centralised submission by Collaboration

Presenter name already specified

Author: VAZQUEZ DOCE, Oton (Technische Universitaet Muenchen (DE))

Presenter: VAZQUEZ DOCE, Oton (Technische Universitaet Muenchen (DE))

Session Classification: Poster Session

Track Classification: Electromagnetic and weak probes