Quark Confinement and the Hadron Spectrum XI



Contribution ID: 125 Type: not specified

Direct photon production in high-energy nuclear collisions

Thursday 11 September 2014 16:30 (30 minutes)

Direct photons have always been considered a promising probe for the very early phases of high-energy nuclear collisions. Prompt photons reveal information about the initial state and its possible modifications in nuclei. In this context they should be one of the best probes for effects of gluon saturation. Thermal photons emitted from the produced matter in nuclear collisions carry information on the temperature of the very early phase. In particular a simultaneous measurement of yield and elliptic flow of thermal photons can put strong constraints on the early time dynamics of the system. Recent analysis at RHIC has shown very intriguing results, which are not fully understood theoretically.

I will review the status of results on direct photon measurements at RHIC and LHC and their interpretation. Furthermore I will discuss prospects for future measurements in particular at the LHC.

Author: PEITZMANN, Thomas (University of Utrecht (NL))Presenter: PEITZMANN, Thomas (University of Utrecht (NL))Session Classification: Parallel IV: D7 Deconfinement

Track Classification: Section D: Deconfinement