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Measurement of $\omega \rightarrow 3\pi$ in pp collision at 7TeV with ALICE

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The ω meson is a promising probe to investigate the properties of the QGP. It is well known that the yield of high- p_t particles is suppressed in nucleus-nucleus collisions relative to that in pp collisions.

The effect is attributed to the energy loss of the energetic parent partons traversing the created medium. Since π^0 and ω mesons have the same quark content (u and d), the comparison of the suppression between π and ω can provide information whether the energy loss occurs at the parton level or not.

The ALICE detector covers a wide central region ($|\eta| < 0.9$) to reconstruct charged particles and has two electro-magnetic calorimeters with good energy resolution. The ω meson is reconstructed in the $\pi^0\pi^+\pi^-$ channel in pp collisions at $\sqrt{s} = 7$ TeV over a wide p_t range. This is facilitated by a high-photon energy trigger. We discuss the trigger performance and cut optimization and present the latest results of the analysis.

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