

$\omega \rightarrow \pi^0 \pi^+ \pi^-$ in pp collisions at 7TeV with ALICE

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The ω meson is a promising probe to investigate the properties of the Quark-Gluon Plasma (QGP). It is well known that the yield of high-pT particles is suppressed in nucleus-nucleus collisions relative to that in pp collisions. The effect is attributed to energy loss of parent partons or perhaps of hadrons after freeze-out. Since π^0 and ω mesons have the same quark contents (u and d) but different masses, the comparison of the suppression between π^0 and ω can provide information whether the energy loss occurs at the parton level or not.

In this talk, we discuss the measurement of the ω meson reconstructed in the $\pi^0\pi^+\pi^-$ channel in pp collisions at $\sqrt{s} = 7$ TeV over a wide pT range as a baseline for the nuclear suppression. At high pT the measurement can be further extended by a photon triggered dataset. We discuss the trigger performance, and report the latest status of the analysis.

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