



## Vector meson production in pp collisions at $\sqrt{s} = 7$ TeV and at $\sqrt{s} = 2.76$ TeV measured with the ALICE detector

Low-mass vector meson ( $\rho$ ,  $\omega$ ,  $\phi$ ) production provides key information on the hot and dense state of strongly interacting matter produced in high-energy heavy-ion collisions. Among the various physical observables, strangeness enhancement can be accessed through the measurement of  $\phi$  meson production, while the measurement of the  $\rho$  spectral function can be used to reveal in-medium modifications of hadron properties close to the QCD phase boundary. Vector meson production in pp collisions provides a reference for these studies. Moreover, it is interesting by itself, since it can be used to tune particle production models in the LHC energy range.

Vector mesons can be detected through their decays to muon pairs with the ALICE muon spectrometer. We present transverse momentum spectra of  $\phi$  and  $\rho+\omega$  mesons in the rapidity range  $2.5 < y < 4$  in p-p collisions at  $\sqrt{s} = 7$  TeV, as well as the absolute production cross section at  $\sqrt{s} = 7$  TeV and at  $\sqrt{s} = 2.76$  TeV. We will also discuss the status of the analysis for vector meson studies at forward rapidity in Pb-Pb collisions at  $\sqrt{s_{NN}} = 2.76$  TeV.

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