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## Calculation of $k^*/k^+$ ratio assuming the partial chemical equilibration

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Production of  $K$  in the relativistic heavy-ion collisions at LHC draws strong interest since the ratio involving  $K$  mesons such as  $K/\pi$  or  $K/K^+$  doesn't fit to the statistical model calculations while most of other ratios fit nicely. The reason is possibly that the  $K$  doesn't chemically freeze-out at the same temperature  $T_{ch}$  as other particles do. Rather  $K$  maintains partial chemical equilibrium through the process  $K^* \rightarrow K + \pi$  until the thermal freeze-out temperature,  $T_{th}$ . In this presentation, after fitting the momentum spectra of measured hadrons and ratios involving them measured by the ALICE collaborations with a blast-wave model which assumes the chemical freeze-out at higher  $T_{ch}$  and the thermal freeze-out at lower  $T_{th}$ , the ratio  $K^*/\pi$  is calculated from the parameters thus obtained assuming the partial chemical equilibration of  $K^*$ ,  $K$  and  $\pi$  until  $T_{th}$ , and the result is compared with the data.

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