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## Thermal Model Description of Collisions of Small Systems

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Recently, two experimental observations have attracted high interest: 1. The maxima in the excitation function of the  $K^+/\pi^+$  and  $\Lambda/\pi^+$  ratios around  $\sqrt{s_{NN}} = 8$  GeV, while no maximum is seen in the  $K^-/\pi^-$  ratio. 2. A continuous evolution of the ratios (multi-)strange-over- $\pi$  as a function of the multiplicity in pp, p-Pb and Pb-Pb collisions at LHC energies.

Prediction within the thermal-statistical model of particle ratios from the lowest up to LHC energies and from pp up to central heavy-ion collisions will be given. It will be shown why maxima occur, how they evolve when studying smaller systems (E.g. the maximum of the  $K^+/\pi^+$  ratio will hardly be visible in pp, while the maximum in the  $\Lambda/\pi$  ratio is expected to remain also in pp).

Using the strangeness canonical ensemble, the key parameter is the strangeness correlation volume. It turns out that this quantity also plays a dominating role in describing the variation of the particle ratios from pp to Pb-Pb collisions at LHC energies.

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No

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N/A

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Yes

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Yes

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