XXXIII International (ONLINE) Workshop on High Energy Physics "Hard Problems of Hadron Physics: Non-Perturbative QCD & Related Quests"

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Hadron production on heavy-ion and pp collisions at the LHC with ALICE

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Hadron yields measured in Pb-Pb collisions by the ALICE experiment at the LHC are very well described by the statistical hadronization model, leading to the phenomenologial determination of the hadronization temperature, which is in a very good agreement with predictions from Lattice QCD. This applies not only for hadrons carrying the u,d,s quarks, but also to hadrons with charm quarks, in particular the J/psi meson. The event-multiplicity dependence of strange hadron yields for pp and p-Pb collisions shows a significantlyincreasing trend, indicating that the limit of statistical hadronization may be reached in high-multiplicity pp (p-Pb) collisions.

I will present a selection of results on this topic and complement it with recent results on charm baryon production, which exhibits in pp collisions at the LHC a significantly larger fragmentation compared to measurements in e+e-.

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