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## Investigating collective-like effects in small systems with heavy flavour with ALICE

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In heavy-ion physics, the interest on heavy-flavour measurements in small hadronic systems, like p-Pb and pp, has been for a long time limited to the possibility of providing tests of perturbative QCD, measurements of cold-matter effects in the nuclear medium, and the baseline for observations of hot-medium effects in heavy-ion collisions.

However, such measurements have recently gained additional interest due to the possibility of observing, in pp and p-Pb systems, collective-like effects similar to those expected and measured in heavy-ion collisions. In particular, measurements of angular correlations of heavy-flavour particles with charged particles in pp and p-Pb collisions allow one to investigate the existence of collective behaviour involving heavy flavours, with the particle multiplicity acting as an effective scaling parameter driving the strength of such effects.

In this contribution, ALICE results on open heavy-flavour production in p-Pb collisions at  $\sqrt{s_{NN}} = 5.02$  and 8.16 TeV will be discussed, in both the single-electron and single-muon channels. The elliptic flow coefficient will be shown at central rapidity for electrons from heavy-flavour hadrons decays and at forward rapidity for muons from heavy-flavour hadron decays.

In addition, the latest measurements on charm particle ratios and on the multiplicity dependence of charm particle production in pp and p-Pb collisions will be discussed. The results will be compared with similar measurements in the light-flavour sector and to theoretical models.

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