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Prospects for heavy-ion data-taking with the LHCb Upgrade II

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Owing to its spectrometer acceptance, complementary to the other LHC experiments, and to its excellent tracking and particle identification, LHCb has been performing since the LHC Run2 a unique heavy-ion programme. By exploiting instead the injection of gases in the LHC accelerator beam-pipe, LHCb has been simultaneously acquiring data in fixed-target mode. The sum of the two configurations already gives unique inputs to theoretical models. With the foreseen LHCb Upgrade II, to be operated from Run5, even more possibilities will be opened by the increased detector granularity, the timing capabilities and the new instrumentation. In this contribution, a full overview of the heavy-ion opportunities with LHCb Upgrade II, as discussed in a recent workshop with theoreticians, will be presented and discussed.

Category

Experiment

Collaboration

LHCb

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