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### Jets in Pb-Pb collisions at ALICE

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The research programme of the ALICE experiment at the LHC focuses on studies of the Quark-Gluon Plasma, a state of matter where quarks and gluons are deconfined. The measurement of jets originating from the fragmentation of hard-scattered partons in the early phases of a nuclear collision allows one to study parton energy loss in the hot and dense medium. The dependence of the energy loss on the in-medium path length provides deeper insight into the energy loss mechanisms and can be studied by measuring jet production relative to the event plane orientation. Measurements of the jet structure explore possible modifications of the parton fragmentation due to the interaction with the medium.

In this talk, we show results of measurements of charged jet production in central and peripheral  $\sqrt{s_{\text{NN}}} = 2.76$  TeV Pb–Pb collisions with respect to the event plane. Furthermore, measurements of a set of jet shapes characterising the longitudinal and transverse jet structure will be discussed. The results are compared with a variety of jet quenching Monte Carlo models.

#### Summary

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