

## Measurement of quark and gluon jet fractions: methodology and preliminary results for the CMS

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The generator describes all the microparameters and macroparameters of quark(q) and gluon(g) jets - objects that we recognize in the data. The experimenter is provided with information that allows to determine “jet-by-jet” whether the jet has quark or gluon flavour with a given probability. In 2018, we were the first to notice that instead of flavour recognizing “jet-by-jet”, we can measure q/g-jet fractions in jet sample. The q/g-jet fractions contains important physical information about hard parton process and the process of hadronization. The report is devoted to the method of measuring the q/g-jet fractions at the hadron collider. The technique is illustrated by preliminary measurement results on CMS data.

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