

XXV International Baldin Seminar on High Energy Physics Problems  
"Relativistic Nuclear Physics and Quantum Chromodynamics"



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*Relativistic Nuclear Physics & Quantum Chromodynamics*

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## Measurements of the quark and gluon jet macro parameters with the CMS

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Measurement of the characteristics of quark (q) and gluon (g) jets begins with measuring the q/g-jet fractions in jet sample. To extract the q/g-jet characteristics, two jet samples with significantly different q/g-jet fractions are required. In a real experiment, jet samples differ in kinematics, which leads to the fact that q/g-jet characteristics depend on jet sample. Formulas for kinematic corrections to q/g-jet characteristics are obtained. The technique is illustrated on data from the CMS.

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