

Multi-jets in Photoproduction

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Abstract

Events with three and four jets in photoproduction regime are investigated with H1 detector at HERA. Jets are reconstructed in the central part of the detector within the acceptance of the central tracking system. Events are selected if the transverse energy of the leading jet is $E_T > 7 \text{ GeV}$.

The present theoretical models fail to describe the previous multi-jet state measurements. One improved description is based on the multiple parton interactions models.

The measurements are compared with theoretical calculations. Only when including multiple interactions, the predictions come close to the measurements.