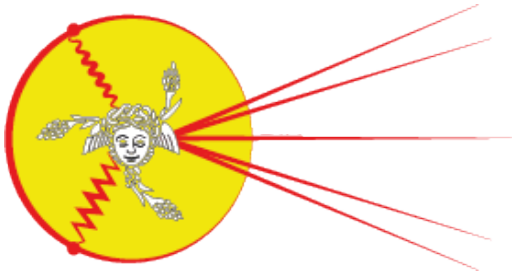

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Diffractive production of J/psi in pp collisions with proton dissociation

Tuesday, 6 September 2016 19:00 (25 minutes)

The amplitude for $\gamma p \to Vp$, where V is a J/ψ or Υ ground state or excited
vector meson, is calculated in a pQCD k_T-factorization approach.
We use this amplitude to predict
the cross section for exclusive photoproduction of $J/\psi, \psi'$ mesons in proton-proton collisions.
Calculations are performed for a variety of unintegrated gluon distributions, and we compare our results
to LHCb data.
Here we especially focus on diffractive production in proton dissociative events.
We notice, that electromagnetic dissociation is calculable directly from proton structure functions without
additional free parameters.
Besides being of interest in their own right, dissociative events constitute an important experimental back-
ground to exclusive production.

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