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Inclusive electroproduction in the resonance region ASTRID HILLER BLIN, WALLY MELNITCHOUK, VICTOR MOKEEV, Thomas Jefferson National Accelerator Facility, JPAC COLLABORATION — We study the resonant contributions into the proton inclusive structure functions in the resonance region. The results on longitudinal/transverse virtual photon cross sections and the structure functions have been updated based on the JLab Hall C results on the longitudinal over transverse cross section ratio. The resonant contributions are evaluatedfrom the JLab CLAS Collaboration results on the nucleon resonance electroexcitation amplitudes, accounting for the interference between all resonances.Our studies have demonstrated that the resonance contribution into inclusive electron scattering remains substantial at all photon virtualities where data are available so far, up to Q^2 of 4.0 GeV^2. Furthermore, the Q^2-evolution of the resonant contributions within the first, second and third resonance regions demonstrates pronounced differences, emphasizing the need for the exploration of the electroexcitation amplitudes for all prominent resonances.These studies are essential for new insights into the nucleon ground-state PDFs in the resonance region, which allow us for the first time to compare the experimental structure functions obtained in the resonance region with those computed from the PDF fit to the data in the DIS region.

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