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Near-threshold photoproduction of J/ ψ of a proton with the CLAS12 experiment

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The photo-production of vector mesons off the proton has long been established as an important tool to access the gluon content of the nucleon. In particular, the photo-production of J/ψ near the threshold energy has been related to the Gravitational Form Factors of the gluons which provide information about the mass and the force distributions in the nucleon. In this talk, I will present results on the near-threshold photoproduction of J/ψ using data taken in 2018 and 2019 by the CLAS12 detector at Jefferson Lab, with an electron beam impinging on a liquid-hydrogen target. This measurement is expected to provide direct insight on the gluons distribution inside the proton.

session

C. Hadron Structure

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Presenter: CHATAGNON, Pierre (Jefferson Lab) **Session Classification:** C. Hadron Structure