

Abstract Submitted
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$J/\psi - 007$ Experiment: A Near Threshold J/ψ Photo-production Measurement in Hall C at Jefferson Lab¹ BURCU DURAN, Temple University, E12-16-007 COLLABORATION — We report on the Jefferson Lab Hall C experiment E12-16-007 (J/ψ -007) where we measured the 2D J/ψ photoproduction cross-section versus momentum transfer t and photon energy E_γ in the kinematic region of the LHCb hidden-charm pentaquark states. The experiment used a high-intensity real photon beam generated by a 10.6 GeV incident electron beam traversing a copper radiator upstream of a liquid hydrogen target. The two high momentum spectrometers of Hall C, HMS, and SHMS were used to detect the e^+e^- and $\mu^+\mu^-$ di-lepton J/ψ decay pairs in coincidence. The spectrometers momentum and angle settings scan a photon beam energy range between 9.1 GeV and 10.6 GeV and $|t|$ up to 5 GeV^2 . The measurements' sensitivity to the s -channel resonant pentaquarks signals is maximal at larger $|t|$. We will present preliminary results of the differential and total J/ψ photoproduction cross-section.

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