

Abstract Submitted
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Light Vector Meson Photoproduction off of ^1H at Jefferson Lab MICHAEL PAOLONE, CHADEN DJALALI, University of South Carolina, RAKHSHA NASSERIPOUR, George Washington University, DENNIS WEYGAND, Thomas Jefferson National Accelerator Facility, MIKE WOOD, Canisius College, CLAS COLLABORATION — Modification of light vector mesons in the nuclear medium continues to be a topic of high interest to the nuclear physics community. Results from recent photoproduction and heavy ion collision experiments have shown a clear broadening of the width in medium, but there remains no consensus on whether the meson undergoes a definite mass shift. An experimental study of the elementary free-space processes is necessary for a precise interpretation of prior in-medium analysis, and is valuable input for theoretical models and calculations. In experiment E04-005, high statistics photoproduction data has been taken in Jefferson Lab's CLAS detector with tagged photon energies up to 5 GeV incident on a LH_2 target. Preliminary results of the e^+e^- decay channel, with emphasis on the ρ - ω interference region, will be shown and compared to similar experimental data of photoproduction off of heavier nuclear targets (^2H to Pb) from Jefferson Lab experiment E01-112.

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