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Short-Range Correlations in ${}^{12}C(e,e'pn)$ RAMESH SUBEDI, Kent State University, JEFFERSON LAB E01-015 COLLABORATION, JEFFERSON LAB HALL A COLLABORATION — Correlations in nuclei, i.e. deviations from independent-particle behaviour, are generally classified into two types: long-range correlations due to the long-range, attractive part of the nucleon-nucleon interaction, and short-range correlations dominated by the short-range, repulsive part of the nucleon-nucleon interaction. We made direct observation of short-range correlated NN-pairs using the exclusive ${}^{12}C(e, e'pN)$ reaction in a triple-coincidence measurement in the experiment E01-015 in Hall A at Jefferson Lab. We will present results from our analysis of the ${}^{12}C(e, e'pn)$ reaction. From this analysis we conclude that there are nearly 20 times more n-p short-range correlated pairs than p-p short-range correlated pairs.

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