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Studying the A=3 EMC Effect in the JLab MARATHON experiment[1] TYLER HAGUE, Kent State Univ - Kent, THE JEFFERSON LAB HALL A COLLABORATION — MARATHON is a 12-GeV era Deep Inelastic Scattering experiment in Hall A at Jefferson Lab (JLab). The experiment will use Tritium, Helium-3, and Deuterium targets to measure cross section ratios. The expected data will allow us to compare the strength of the EMC effect in A=3 mirror nuclei. We can also use this data to extract the neutron to proton structure function ratio F_n^2/F_p^2. Models of the EMC effect diverge in the high Bjorken x region when examining this ratio. The results from the experiment will be critical for comparing to theoretical models and for furthering our understanding of the EMC effect.

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