

Abstract Submitted  
for the DNP17 Meeting of  
The American Physical Society

**Tritium at Jefferson Lab** JASON BANE, University of Tennessee, JEFFERSON LAB HALL A COLLABORATION COLLABORATION — Jefferson Lab's recently upgraded accelerator will provide the perfect opportunity to increase the quality and quantity of the electron scattering world data on tritium. Tritium, the radioactive isotope of hydrogen with a half-life of 12 years, was last used in a large scale electron scattering experiment a few decades ago. This Fall Jefferson Lab will play host to a set of very exciting electron scattering experiments involving tritium. A 25 cm aluminum cell will be filled with 1 kCi of tritium with an internal pressure of approximately 200 psi at 295 kelvin. The tritium target will first see a 10.6 GeV beam to probe the deep inelastic scattering region to study the down to up quark ratio and the EMC effect. Then the beam will be set to 4.3 GeV to investigate SRCs and momentum distributions in the quasi-elastic scattering regime. If time permits, elastic scattering will be used to extract the ratio of the charge radius of tritium and helium3.

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Date submitted: 28 Jun 2017

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