

Abstract Submitted  
for the DNP11 Meeting of  
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**Measurement of emitted tritons and  $^3\text{He}$  from  $^{112,124}\text{Sn}+^{112,124}\text{Sn}$  collisions at  $E_{\text{beam}}=50$  MeV/ nucleon and 120 MeV/nucleon<sup>1</sup>** M. YOUNGS, NSCL/MSU, D.D.S. COUPLAND, W.G. LYNCH, M.B. TSANG, Z. CHAJECKI, R. HODGES, M. KILBURN, FEI LU, J. NOVAK, A. SANETULLAEV, J. WINKELBAUER, NSCL / MSU, JENNY LEE, RIKEN, M.A. FAMIANO, B. GIACHERIO, Western Michigan University, T.K. GHOSH, Variable Energy Cyclotron Centre, P. RUSSOTTO, G. VERDE, C. SFIENTI, INFN — The nuclear symmetry energy affects many aspects of nuclear structure, nuclear astrophysics, and nuclear reactions. The spectral ratio of neutrons to protons from central heavy ion collisions is sensitive to the symmetry energy below saturation density, but is difficult to measure.  $t/{}^3\text{He}$  ratios, however, provide an easier measurement, since neutron detection efficiency is not an issue. A recent experiment at NSCL/MSU has measured n/p ratios from collisions of  $^{112,124}\text{Sn}+^{112,124}\text{Sn}$  at  $E_{\text{beam}}=50$  MeV/nucleon. In addition,  $t/{}^3\text{He}$  ratios were measured at the same time. First results of the  $t/{}^3\text{He}$  double ratios as well as systematic studies of theoretical calculations of n/p and  $t/{}^3\text{He}$  double ratios will be discussed.

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