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Differences in the Transverse Flow of ³H and ³He Fragments Z. KOHLEY, E. BELL, D.V. SHETTY, G.A. SOULIOTIS, S. SOISSON, B. STEIN, S. WUENSCHEL, L. MAY, S.J. YENNELLO, Texas A & M Cyclotron Institute, NIM-ROD COLLABORATION — The transverse flow of ³H and ³He fragments has been examined in the reactions of ⁵⁸Fe+⁵⁸Fe and ⁵⁸Ni+⁵⁸Ni at 45 MeV/u. The calculated flow parameters showed an increase in the flow for the ³He particles in comparison to the ³H for both systems. This difference in the transverse flow demonstrates a dependence of the flow parameter on the N/Z of the particle of interest. The results from ⁵⁸Fe+⁵⁸Fe system are in qualitative agreement with previous theoretical predictions [1] in which the difference in the flow parameter between the ³He and ³H particles was shown to be sensitive to the density dependence of the symmetry energy. It may be possible to extract additional information from the differences in the ³H and ³He flow parameters through a comparison of the ⁵⁸Fe+⁵⁸Fe and ⁵⁸Ni+⁵⁸Ni systems.

[1] L. Scalone *et al.*, Phys. Lett. B **461**, 9 (1999).

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