

Abstract Submitted  
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**Mid-rapidity Emission in Reactions of Sn Isotopes at 26 MeV/nucleon** J. GAUTHIER, M. BARBUI, X. CAO, K. HAGEL, J.B. NATOWITZ, R. WADA, S. WUENSCHHEL, Cyclotron Institute, Texas A&M University — Definitive studies of the properties of neutron rich nuclear matter are difficult. The experimental capabilities to carry out such experiments should be much improved as very neutron-rich beams become routinely available. Until then, selective exploitation of particular reaction mechanisms may offer some possibilities to probe such matter. Previous studies of collisions of Sn isotopes by the NIMROD collaboration provided evidence for creation of a highly neutron enriched mid-rapidity region [1]. Similar studies for other systems have led to different conclusions [2, 3]. We will report on a new study of these reactions in an attempt to clarify this situation. Our interest is driven by our efforts to probe the characteristics of low density neutron-rich clustered matter.

[1] D.V. Shetty et al., Phys. Rev. C 68, 054605 (2003).

[2] L. Sobotka et al., Phys. Rev. C 62, 031603 (2000).

[3] H. Xu et al., Phys. Rev. C 65, 061602 (2002).

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