

Abstract Submitted
for the DNP11 Meeting of
The American Physical Society

Precision Measurement of Isospin Diffusion JACK WINKELBAUER, National Superconducting Cyclotron Laboratory, R. HODGES, M.B. TSANG, W.G. LYNCH, Z. CHAJECKI, D. COUPLAND, M. YOUNGS, F. LU, A. SANETULLAEV, R. SHANE, S. TANGWANCHAROEN, M. FAMIANO, S. GEORGE, T. GHOSH, J. DUNN, S. DYE, S. NIELSEN, A. RAMOS, R. CHARITY, L. SOBOTKA, J. ELSON, T. RANA, M. EL HOUSSENY — In heavy-ion collisions, the tendency for isospin to drift from a neutron (proton) rich region to a neutron (proton) deficient region is sensitive to the density dependence of the symmetry energy. Until recently, most of the isospin diffusion results have been obtained with mid central to central collisions and different isospin observables have been used in experiment and in model simulations. To provide more accurate understanding of the dependence of isospin diffusion on impact parameters and different isospin observables, we have measured isotopic fragment and residue yields for $^{112,118,124}\text{Sn} + ^{112,118,124}\text{Sn}$ collisions at $E/A=70$ MeV. The measurements were carried out at the Coupled Cyclotron Facility at Michigan State University. Fragment yields were measured using the Large Area Silicon Strip Array (LASSA) and heavy residue yields emitted at the forward angles were measured using the S800 Spectrograph. Impact parameter was selected using the MSU Miniball-WU Miniwall phoswich array. Preliminary results will be presented. Work supported by the National Science Foundation under Grant PHY-0606007.

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Date submitted: 05 Jul 2011

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