

Abstract Submitted
for the DNP11 Meeting of
The American Physical Society

Isospin Dependence of Nucleon Exchange in $78,86\text{Kr} + 40,48\text{Ca}$ Reactions at $E/A = 10$ MeV ERIC HENRY, WOLF-UDO SCHRODER, JAN TOKE, MICHAEL QUINLAN, HARDEV SINGH, University of Rochester, ISODEC COLLABORATION — Preliminary results are presented of theoretical simulation calculations and experimental data obtained in the ISODEC experiment performed with the CHIMERA multi-detector array at LNS/Catania. One of the main objectives of this experiment measuring A , Z and energy of projectile and target remnants was to explore the isospin dependence of the flow of energy, mass and charge in damped nuclear reactions involving systems of very different initial isospin asymmetries. With a bombarding energy of $E/A = 10$ MeV the reaction systems approach the limits of an adiabatic nuclear response associated with a separation of relaxation time scales of macroscopic and microscopic degrees of freedom. However, non-equilibrium effects are expected to be still relatively weak, such that the effects of the driving forces underlying isospin relaxation are not masked by pre-equilibrium nuclear disintegration processes.

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Date submitted: 01 Jul 2011

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