

Abstract Submitted  
for the APR21 Meeting of  
The American Physical Society

**The Isoscaling Results From Ca+Ni and Ca+Sn Systems at  $E/A=56, 140\text{MeV}$** <sup>1</sup> RENSHENG WANG, BETTY TSANG, National Superconducting Cyclotron Laboratory, MSU, ZBIGNIEW CHAJECKI, West Michigan University, KYLE BROWN, CHI-EN TEH, National Superconducting Cyclotron Laboratory, MSU — When comparing 2 Heavy-Ion-Collision(HIC) systems with same temperature but different neutron and proton (isospin) content, the isotope yield ratio with neutron number and proton number (N,Z) be expressed by an exponential function  $R21= Y_2(N,Z)/Y_1(N,Z) = C\text{Exp}(\alpha N + \beta Z)$ . This phenomenon is called isoscaling in HIC suggesting that the nuclear system reaches chemical equilibrium in most heavy ion collisions. In this talk, a systematic isoscaling results from  $40,48\text{Ca}+58,64\text{Ni}$  and  $40,48\text{Ca}+112,124\text{Sn}$  systems at  $E/A=56, 140\text{MeV}$  and neutron spectra constructed from isoscaling will be presented.

<sup>1</sup>PHY-1565546. DE-SC0014530, DE-NA0002923

Rensheng Wang  
National Superconducting Cyclotron Laboratory, MSU

Date submitted: 11 Jan 2021

Electronic form version 1.4