

# ANOMALIES IN THE NUCLEAR DISSOCIATION CROSS SECTIONS OF $^{208}\text{Pb}$ at 33 TeV<sup>1</sup>

*S. Datz, J. R. Beene, P. Grafström,<sup>2</sup> H. Knudsen,<sup>3</sup> H. F. Krause,  
R. H. Schuch,<sup>4</sup> and C. R. Vane*

We have measured total nuclear disintegration cross sections for  $^{208}\text{Pb}$  ions at 33 TeV (160-GeV A) colliding with C, Si, Cu, Sn, and Pb. Using well established theory, we calculate the nuclear electromagnetic, electron electromagnetic, and the hadronic contributions and find that their sum underestimates the measured cross sections. An additive correction term linear in target  $Z_T$  (i.e., 120  $Z_T$  mb) is necessary to bring agreement between theory and experiment. The source of this additional term is unknown.

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1. Abstract of published paper: *Phys. Rev. A* **79**, 3355 (1997).
  2. CERN, Geneva, Switzerland.
  3. Institute of Physics and Astronomy, Aarhus University, Denmark.
  4. Stockholm University, Sweden.