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Wolfgang Bauer* (bauer@pa.msu.edu), Michigan State University, Department of Physics and Astronomy, 4208 BPS, East Lansing, MI 48824, and **Kerstin Paech** and **Scott Pratt**. *Does Zipf's Law hold in Nuclear Fragmentation?*

If atomic nuclei are bombarded with projectiles at relativistic energies, they disintegrate into smaller fragments. The distribution of fragment masses and other observables lets us conclude that these fragmenting nuclei undergo a phase transition in the process. We will present results on the universality class of this phase transition, with particular emphasis on the finite size modifications. The question if the fragment multiplicity distributions confirm to Zipf's Law will be answered. (Received August 24, 2009)