1035-17-660   **Pamela A Richardson*** (`richarpa@westminster.edu`), Department of Mathematics and CS, Westminster College, New Wilmington, PA 16172. *The Centroid of the Cheng-Kac Jordan Superalgebras.* Preliminary report.

The centroid of a Jordan superalgebra consists of the natural "superscalar multiplications" on the superalgebra. A philosophical question is whether the natural concept of "scalar" in the category of superalgebras should be that of superscalars or ordinary scalars. Basic examples of Jordan superalgebras are the simple Jordan superalgebras, which were classified over an algebraically closed field of characteristic not 2 by M. Racine, E. Zelmanov, and C. Martinez. We previously showed that those classes of superalgebras with semisimple even part have no odd centroid when considered over a general ring of scalars. The class of Cheng-Kac Superalgebras is one of two classes of simple Jordan Superalgebras whose even part is not semisimple. Here, we determine the centroid of the analogues of the Cheng-Kac superalgebras over general rings of scalars and show that they have no odd centroid, providing further evidence that ordinary scalars are the proper concept. (Received September 13, 2007)