1126-13-106   **Luchezar L. Avramov**, **Courtney Gibbons** and **Roger A. Wiegand*** (`rwiegand1@unl.edu`), Department of Mathematics, University of Nebraska, Lincoln, NE 68588-0130. *Syzygies and Betti tables over short Gorenstein algebras.* Preliminary report.

Let k be a field and R a short, standard graded Gorenstein k-algebra with embedding dimension $e \geq 3$. (Thus the Hilbert series of R is $1 + es + s^2$.) The additive semigroup $\mathbf{B}$ of all Betti tables of finitely generated graded R-modules is atomic but very far from being factorial. We will show how the atoms of $\mathbf{B}$ arise as Betti tables of cosyzygies of ideals of R and describe some specific relations among these atoms. (Received January 07, 2017)