

1116-13-1967

Courtney R. Gibbons* (crgibbon@hamilton.edu), 198 College Hill Road, Clinton, NY 13323,
and **Luchezar Avramov** and **Roger Wiegand**. *A ring without a Boij-Soederberg
theory*. Preliminary report.

A graded short Gorenstein ring R can be thought of as a ring with Hilbert series $1 + es + s^2$, where e is the multiplicity of the ring. In joint work with Avramov and Wiegand, we show that when $e \geq 3$, there are Betti diagrams of modules over R that cannot be realized as rational sums of diagrams that lie along extremal rays in the cone of Betti diagrams over R . (Received September 21, 2015)