1056-13-599Daniel Erman* (derman@math.berkeley.edu), Department of Mathematics, University of
California, Berkeley, CA 94705. Beyond Numerics in Boij-Soederberg Theory.

Boij-Soederberg theory illustrates that the minimal free resolution of a graded module "factors" as a sum of pure resolutions. A natural question raised by this theory is: Does the numerical decomposition lead to any sort of factorization of the module itself? We will show that the answer is "yes" in a number of surprising cases. (Received September 14, 2009)